



# भारत का राजपत्र The Gazette of India

प्राधिकार से प्रकाशित  
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No. 50] NEW DELHI, SATURDAY, DECEMBER 16 1989 (AGRAHAYANA 25, 1911)

इस भाग में भिन्न पृष्ठ संख्या की जाती है जिससे कि यह अना संकलन के रूप में रखा जा सके

[Separate paging is given to this Part in order that it may be filed as a separate compilation]

## भाग III—खण्ड 2

### [PART III—SECTION 2]

पेटेंट कार्यालय द्वारा जारी की गई पेटेंटों और डिजाइनों से सम्बन्धित अधिसूचनाएं और नोटिस

[Notifications and Notices issued by the Patent Office relating to Patents and Designs]

#### THE PATENT OFFICE PATENTS AND DESIGNS

Calcutta, the 16th December 1989

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Patent Office Branch,  
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The States of Gujarat, Maharashtra, and Madhya Pradesh,  
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Dadra and Nagar Haveli.

Telegraphic address "PATOFFICE".

Patent Office Branch,  
Unit No. 401 to 405, 3rd Floor,  
Municipal Market Building,  
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New Delhi-110 005

The States of Haryana, Himachal Pradesh, Jammu and  
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Union Territories of Chandigarh and Delhi.

Telegraphic address "PATENTOFIC".

Patent Office Branch,  
61, Wallajah Road,  
Madras-600 002

The States of Andhra Pradesh, Karnataka, Kerala, Tamil-  
nadu, and the Union Territories of Pondicherry, Laccadive,  
Minicoy and Amindivi Islands.

Telegraphic address "PATENTOFIS".

Patent Office, (Head Office),  
"NIZAM PALACE", 2nd M.S.O. Building,  
5th, 6th and 7th Floor,  
234/4, Acharya Jagadish Bose Road,  
Calcutta-700 020

Rest of India.

Telegraphic address "PATENTS".

All applications, notices, statements or other documents  
or any fees required by the Patents Act, 1970 or the  
Patent Office.

*Fees :—*The fees may either be paid in cash or may be  
sent by Money Order or Postal Order, payable to the Con-  
troller at the appropriate Offices or by bank draft or cheque,  
payable to the Controller drawn on a scheduled bank at  
the Place where the appropriate office is situated.

## पेटेंट कार्यालय

एकस्व तथा अभिकल्प

कलकत्ता, दिनांक 16 दिसम्बर 1989

पेटेंट कार्यालय के कार्यालयों के पते एवं क्षेत्राधिकार

पेटेंट कार्यालय का प्रधान कार्यालय कलकत्ता में अवस्थित है तथा बम्बई, दिल्ली एवं मद्रास में इसके शाखा कार्यालय हैं, जिनके प्रादेशिक क्षेत्राधिकार जोन के आधार पर निम्न रूप में प्रदर्शित हैं :—

पेटेंट कार्यालय शाखा, टोड़ी इस्टेट  
तीसरा तल, लोअर परले (पश्चिम),  
बम्बई-400 013.

गुजरात, महाराष्ट्र तथा मध्य प्रदेश राज्य क्षेत्र  
एवं संघ शासित क्षेत्र गीआ, दमन तथा दिव  
एवं दादरा और नगर हवेली।

तार पता—“पेटेंटोफिस”।

पेटेंट कार्यालय शाखा,  
एकक सं. 401 से 405, तीसरा तल,  
नगरपालिका बाजार भवन,  
सरस्वती मार्ग, करोलबाग,  
नई दिल्ली-110 005.

हरियाणा, हिमाचल प्रदेश, जम्मू तथा कश्मीर,  
पंजाब, राजस्थान तथा उत्तर प्रदेश  
राज्य क्षेत्रों एवं संघ शासित क्षेत्र  
चंडीगढ़ तथा दिल्ली।

तार पता—“पेटेंटोफिस”।

पेटेंट कार्यालय शाखा,  
61, बालाजिह रोड,  
मद्रास-600 002.

आंध्र प्रदेश, कर्नाटक, केरल, तमिलनाडु राज्य क्षेत्र  
एवं संघ शासित क्षेत्र पाण्डिचेरी, लक्षद्वीप,  
मिनिकाय तथा एमिनिदिब द्वीप।

तार पता—“पेटेंटोफिस”।

पेटेंट कार्यालय (प्रधान कार्यालय),  
निजाम पैलेस, द्वितीय बहुतलीय कार्यालय भवन,  
5, 6 तथा 7वां तल,  
234/4, आचार्य जगदीश बोस रोड,  
कलकत्ता-700 020.

भारत का अवशेष क्षेत्र।

तार पता—“पेटेंट्स”।

पेटेंट अधिनियम, 1970 या पेटेंट नियम, 1972 में  
अपेक्षित सभी आवेदन पत्र, सूचनाएं, विवरण या अन्य प्रलेख  
पेटेंट कार्यालय के केवल उपयुक्त कार्यालय में ही प्राप्त किए  
जायेंगे।

शुल्क :—शुल्कों की अदायगी या तो नकद की जायेगी अथवा  
उपयुक्त कार्यालय में नियंत्रक को भुगतान योग्य धनादेश अथवा  
ड्राक आदेश या जहां उपयुक्त कार्यालय अवस्थित है; उस स्थान  
के अनुमोचित बैंक से नियंत्रक को भुगतान योग्य बैंक ड्रफ्ट  
अथवा चेक द्वारा की जा सकती है।

## CORRIGENDUM

In the Gazette of India, Part III, Section 2, dated 14th January 1989 under the heading Complete Specification accepted, in Complete Specification No. 164083, read the name of the applicants as SCHADE FORDERTECHNIK GMBH & CO., instead of GUSTAV SCHADE MASCHINENFABRIK GMBH & CO.

## CHANGE OF NAME OF THE APPLICANTS FOR PATENTS

Application for Patent No. 398/Cal/85 filed on 24th May 1985 notified in the Gazette of India, Part III, Section 2 dated 14th January 1989 will proceed in the name of SCHADE FORDERTECHNIK GMBH & CO. by order dated 21st December 1987.

APPLICATION FOR PATENTS FILED AT THE HEAD OFFICE 234/4, ACHARYA JAGADISH BOSE ROAD, CALCUTTA-20

The dates shown in the crescent brackets are the dates claimed Under Section 135, of the Patents Act, 1970.

The 8th November, 1989

935/Cal/89. India Foil Limited. Vacuum type packages for vacuum packaging of food, tea and like articles.

936/Cal/89. RCA Licensing Corporation. Method of electro-photographically manufacturing a luminescent screen assembly for a cathode-ray tube.

937/Cal/89. James Bain Noble. Directional drilling apparatus and method.

938/Cal/89. Ici India Limited. A process for the catalytic hydrogenation of para hydroxy mandelic acid or its sodium salt to para hydroxy phenylacetic acid.

The 9th November, 1989

939/Cal/89. E.I. Du Pont De - Nemours and Company. Needling process for spunbonded composites.

940/Cal/89. Hollandse Signallapparaten B.V. Radar apparatus and side-lobe suppression unit suitable for application in such a radar system.

941/Cal/89. Copyguard Enterprises S.A. A method and an apparatus for preventing unauthorised recording on tapes of video programmes.

APPLICATION FOR PATENTS FILED AT THE PATENT OFFICE BRANCH, MUNICIPAL MARKET BUILDING, 3RD FLOOR, KAROL BAGH, NEW DELHI-5

The 9th October, 1989

914/Del/89. Dorr Oliver Incorporated, "Corn steeping process and apparatus".

915/Del/89. ICI Australia Operations Proprietary Ltd, "Ceramic powders". (Convention date 13th October, 1988) (Australia).

916/Del/89. C. R. Bard, Inc, "Balloon dilatation catheter with integral guidewire".

The 11th October, 1989

917/Del/89. Devtech Inc, "A preform for a monobase container".

918/Del/89. The B.F. Goodrich Co, "Process for polymerizing vinyl monomers in a thickened aqueous medium". [Divisional date 30th December, 1986].

The 12th October, 1989

919/Del/89. Hemant Dhingra, "Rotary internal combustion engine".

920/Del/89. Hemant Dhingra, "Rotary internal combustion engine".

921/Del/89. Motorola Inc, "Power conservation method and apparatus for a portion of a predetermined signal".

922/Del/89. Courtaulds Coatings Ltd, "Coating compositions". (Convention date 13th October, 1988) (U.K.).

923/Del/89. Motorola Inc, "Digital automatic gain control".

924/Del/89. Courtaulds Coatings Ltd, "Antifouling coatings". (Convention date 13th October, 1988) (U.K.).

The 16th October, 1989

925/Del/89. Ashesh Chandra Mishra, "Population (fertility and sterility) control method for living beings".

926/Del/89. Vicente Lopez De Foronda Fernandez, "Improvements introduced in air impact molding machines".

927/Del/89. Gregory Gould, "Method and apparatus for auditing means used for measuring characteristics of a bulk material and for extracting an aliquot from a bulk material convention".

928/Del/89. Piaggio Veicoli Europei S.r.l, "Indicator unit displaying the running position of the speed gear in a vehicle, in particular in a two-wheeler".

929/Del/89. Motorola Inc, "Power conservation method and apparatus for a portion of a synchronous information signal".

930/Del/89. Imperial Chemical Industries PLC, "Chemical hybridisation of dicots". (Convention date 14th October, 1988) (U.K.).

931/Del/89. Imperial Chemical Industries PLC, "Chemical hybridisation of dicots". (Convention date 14th October, 1988) (U.K.).

The 17th October, 1989

932/Del/89. Cosmo Films Ltd, "A process for the preparation of synthetic paper".

933/Del/89. Shri Ram Institute for Industrial Research, "A process for the preparation of cyclized rubber".

934/Del/89. Thomson Consumer Electronics, "Process and device for movement estimation in a sequence of animated images".

935/Del/89. Telemecanique, "A safety device for a switching appliance formed by assembling together several removable modular elements".

The 18th October, 1989

936/Del/89. Standipack Pvt. Ltd, "An improved construction of a dispenser".

937/Del/89. Standipack Pvt. Ltd, "An improved construction of a dispenser".

938/Del/89. Standipack Pvt. Ltd, "A dispenser".

939/Del/89. The Procter & Gamble Co, "Liquid laundry detergent with curable amine functional silicone for fabric wrinkle reduction".

940/Del/89. The Procter & Gamble Co, "Acidic liquid fabric softener with yellow color that changes blue upon dilution".

941/Del/89. Exxon Chemical Patents, Inc, "Zeolites for reforming catalysts".

942/Del/89. Zeman Bauclemente Produktionsgesellschaft m.b.h, "Process and device for roll-bending profile sheets metal".

943/Del/89. Biuro Studiow Projektow i Realizacji Inwestycji Przemyslu Nieorganicznego "BIPROK WAS", "Method of carbonation of ammoniated brine precarbonated in the solvay ammonia soda process".

944/Del/89. Vsesojuzny Nauchno Issledovatel'sky i Proektny Institut Aljuminiovoj, Magniovoj i Elektrodoj Promyslennosti, "Mechanical shaft-end seal assembly".

945/Del/89. The Standard Oil Co, "Catalyst and catalyst precursor containing vanadium and antimony".

The 19th October, 1989

946/Del/89. Council of Scientific & Industrial Research, "Improvement in or relating to the process for manufacture of fuel gas from slack solid fuel particularly high ash coal".

947/Del/89. Council of Scientific & Industrial Research, "A process for the preparation of a compound from lignin a paper mill waste and formaldehyde which is useful to remove mercury from industrial wastes".

948/Del/89. Council of Scientific & Industrial Research, "An improved automatic burette".

949/Del/89. Council of Scientific & Industrial Research, "A process for the preparation of cementitious binder from aluminium industries waste, RED MUD".

950/Del/89. Council of Scientific & Industrial Research, "A synergistic fire retardant composition for natural rubber and its products and natural rubber and its products incorporating the fire retardant composition".

951/Del/89. Council of Scientific & Industrial Research, "A direct reading portable atmospheric corrosion monitor".

952/Del/89. Council of Scientific & Industrial Research, "A method for preparation of ultrafine silicon carbide powder from cashew nut shell oil resin".

953/Del/89. Council of Scientific & Industrial Research, "A process for the synthesis of a N-substituted amides of L-tyrosyl-D-alanyl-glycyl-L-n-methyl-phenylalanylglycine".

954/Del/89. Council of Scientific & Industrial Research, "Process for the preparation of crystalline titanium silicate TS-2".

955/Del/89. Council of Scientific & Industrial Research, "An improved process for the preparation of crystalline titanium silicate TS-1".

955/Del/89. Council of Scientific & Industrial Research, "An Process for the preparation of crystalline metallosilicate material".

957/Del/89. Council of Scientific & Industrial Research, "A process for the preparation of catalyst composite material".

958/Del/89. Council of Scientific & Industrial Research, "A process for reforming of pyrolysis naphtha".

959/Del/89. Council of Scientific & Industrial Research, "A process for the preparation of vapour phase inhibitor suitable for protection of ferrous materials from atmospheric corrosion".

960/Del/89. The B.F. Goodrich Co., "Modification of vinyl dispersion resins for improved elasticity and hand".

961/Del/89. Bonas Machine Co. Ltd, "Heald control system". (Convention date 21st November, 1988) (U.K.).

962/Del/89. The Lubrizol Corporation, "Liquid compositions containing carboxylic esters".

963/Del/89. Hunter Douglas Industries B.V., "Tape spacer". (Convention date 4th November, 1988) (U.K.).

The 20th October, 1989

964/Del/89. Barry L. Butler, "Wind resistant two axis tracker for energy or radiation concentration".

965/Del/89. Esco Corporation, "Method of installing a mining tooth point".

966/Del/89. BP Chemicals Ltd, "Method for producing a filled water-cross-linkable silane copolymer composition".

967/Del/89. Blendax GmbH, "Process for producing bristle materials".

968/Del/89. Standipack Pvt. Ltd, "A dispenser for use in a bag and box packaging system".

#### OPPOSITION PROCEEDINGS

An opposition has been entered by Vikram Forgings & Allied Industries Pvt. Ltd. to the grant of a patent on application No. 164840 made by Trade and Industry Private Limited.

#### PATENTS SEALED

159287 161658 162055 162410 164067 164108 164319  
164473 164505 164685.

CAL - 4

DEL - 3

MAS - 2

BOM - 1.

#### COMMERCIAL WORKING OF PATENTED INVENTIONS

##### ELECTRICAL LIST NO. 1

The following patents in the field of Electrical Engineering Industry are not being commercially worked in India as admitted by patentees in the statements filed by them under section 146(2) of the Patents, Act, 1970 in respect of calendar year 1988 generally on account of want or request for licenses to work the patented invention. Persons who are interested to work the said patents commercially may contact the patentees for the grant of a license for the purpose.

| Patent No. | Date of Patent | Name & Address of the Patentee   | Title of the Invention  |
|------------|----------------|--|---|
| 1          | 2              | 3  | 4   |
| 149716     | 2-8-1979       | Brakes India Ltd.<br>Padi, Madras-600 050 Tamil Nadu, India.   | An electric switch for direct current circuits.   |
| 158715     | 17-11-1983     | (Dr.) Jose Thaikattil Physician<br>University Health Centre, Calicut<br>University P.O. Kerala State, India. | A tamper-proof seal for electric lamps.   |
| 159245     | 30-1-1984      | Hoechst Aktiengesellschaft<br>D-6230 Frankfurt am Main 80,<br>Federal Republic of Germany                    | A process for the preparation of a catalytically active electrode material for preparation of a catalytically active electrode material for oxygen consuming electrode. |
| 148076     | 19-11-1979     | MANDAYAM AMMANJI SRISHAILA<br>No. 1, 9th Cross Road, Swimming Pool<br>Extension, Bangalore-560 003, India.   | A device for concealed electrical wiring.   |
| 154717     | 5-9-1981       | (DR) JOSE THAIKATTIL<br>University Health Centre, Calicut<br>University P.O. 673635, Kerala State            | A holder for electric lamps.  |
| 158759     | 30-1-1984      | ISOVOLTA OSTERREICHISCHE ISOLIERSTOFFWERKE AG.<br>ISOVOLTA, A-2351 Wiener Neudorf Austria.                   | A process for the preparation of an electrical insulating material.   |

| 1      | 2          | 3   | 4   |
|--------|------------|---|---|
| 157625 | 11-4-1984  | Kabelschlepp GmbH.<br>Marienborner Str. 75, 5900 Siegen 1<br>West Germany.                | An energy line transmission chain.  |
| 153127 | 17-11-1980 | Oronzio De Nora Impianti Electrochimici<br>S.P.A.<br>Via Bistolfi, 35-20134 Milan, Italy. | A bipolar diaphragm or membrane electrolyzer.   |
| 153129 | 17-11-1980 | Do.   | Novel electrolyser having means for electrically connecting valve metal anode ribs and cathodically resistant metal cathode ribs. |
| 154715 | 12-12-1980 | Do.   | A process for preparing a homogeneous phase of atleast two different metals.  |

## COMMERCIAL WORKING OF PATENTED INVENTIONS

## MECHANICAL LIST NO :1 &amp; GENERAL

The following Patents in the field of Mechanical and General Engineering Industry are not being commercially worked in India as admitted by Patentees in the statements filed by them under section 146(2) of the Patents Act, 1970 in respect of calendar year 1988 generally on account of want of request for licences to work the Patented invention. Persons who are interested to work the said Patents commercially may contact the patentees for the grant of a licence for the purpose.

| Patent No.<br>1 | Date of Patent<br>2 | Name & Address of the Patentee<br>3   | Title of the Invention<br>4   |
|-----------------|---------------------|---|---|
| 147745          | 22-7-1977           | AHMEDABAD TEXTILE INDUSTRY'S<br>RESEARCH P.O. POLYTECHNIC,<br>AHMEDABAD, 380015, GUJARAT, INDIA.  | A rapid abrasion testing means for textile fabrics.   |
| 148043          | 12-12-1978          | Do.   | A method and equipment for recovery of high boiling petroleum fractions and for terpentine present in a gaseous mixture issuing as exhaust from textiles and like dryers. |
| 148672          | 12-12-1978          | Do.   | A novel process and apparatus to recover steam and hot water from blow-down Water of a boiler.  |
| 155925          | 29-8-1983           | Do  | An improved top roller cleaner for textile machinery in particular for ring frames, fly frames and draw frames.   |
| 157585          | 6-12-1984           | Do  | Improvements in or relating to a bobbin for ring frames used in spinning mills.   |
| 160028          | 29-1-1986           | Do.   | Device for reducing noise in course of direct stem injection into liquors from heating thereof.   |
| 157620          | 23-1-1985           | Ashok Pravinchandra Dave and Kaushik<br>Pravinchandra Dave, A/8, Arunodaya, Juhu<br>Lane, Andheri (W), Bombay-400 058,<br>Maharashtra, India. | An improved luggage having instantly attachable and detachable seat.  |
| 160618          | 21-6-1985           | Balcke-Durr A.G. Homberger Str. 2, 4030,<br>Ratingen, 1, West Germany.  | An improved cleaning device for regenerative heat exchangers.   |
| 160619          | 21-6-1985           | Do.   | An improved regenerative heat exchanger.  |
| 149290          | 9-7-1980            | CEMENDIA COMPANY LTD., Steelcrete<br>House, Dinshaw Vachha Road, Bombay-<br>400 020, Maharashtra, India.                                      | Pile and linear assembly process for the manufacture thereof and method of piling employing such assembly.  |
| 158627          | 13-3-1984           | (Dr.) Dipak Chandiramani 3/1, Maitri Park,<br>Chembur, Bombay-400 071, India.   | An improved method of shielded metal-arc welding resulting in the reduction of hydrogen pick-up in weldments and weldments obtained thereby.                              |

| 1      | 2          | 3  | 4  |
|--------|------------|--|--|
| 142800 | 28-11-1975 | Elpro International Ltd., Chinchwad, Poona-11033, Maharashtra, India.  | A Cassette for holding X-ray film for taking X-ray picture.  |
| 146252 | 30-8-1977  | Do.  | Cobalt-60 teletherapy unit for radiation eg. for treatment of cancer.                                      |
| 146942 | 20-8-1977  | Do   | A cobalt 60 teletherapy unit.  |
| 146943 | 19-8-1977  | Do.  | Means for locking the source drawer to the pneumatic means of a cobalt 60 teletherapy unit.                |
| 146944 | 20-8-1977  | Do.  | An adjustment means for the source head of a cobalt 60 teletherapy unit.                                   |
| 147002 | 20-8-1977  | Do.  | Source head of a cobalt 60 teletherapy unit.   |
| 146820 | 19-11-1976 | Hindustan Lever Limited, 165-166, Hindustan Lever House, Backbay Reclamation, Bombay-400 020, Maharashtra India. | Toothbrushes.  |
| 147562 | 19-1-1978  | Do.  | An improved device for pouring pourable materials such as liquids slurries and colloids from a container.  |
| 149288 | 7-3-1979   | KABELSCHLEPP GmbH, Naruebrirber/ Str. 75, D-5900, Siegen 1, West Germany.  | Improvements in supply line support ducting.   |
| 152929 | 11-5-1981  | Do.  | Energy transmission conduit.   |
| 152930 | 11-5-1981  | Do.  | Energy transmissio conduit.  |
| 161589 | 29-1-1986  | Do.  | Guide chain for guiding energy lines.  |
| 162419 | 11-11-1986 | Meka Papa Roa, Amma Linos Pvt. Ltd., Woman Graduates Union Road, Colaba Bombay-400 005. Maharashtra, India.      | An improved process for the manufacture of hollow section beams for buildings.                             |
| 162420 | 28-10-1986 | Do.  | A mould for manufacturing of pre-cast beams or troughs.  |
| 160860 | 30-10-1984 | Narendra Sheth, Nawaz Court, 3rd Floor, 128-C/F, August Kranti Marg, Bombay-400 036, Maharashtra, India.         | Solar energy disc type concentrating collector.  |
| 150919 | 16-6-1978  | Sandvik Aktiebolag, Fack 5-811 01, Sandviken 1, Sweden.  | Bearing means for rotary drill bits.   |
| 154583 | 26-3-1981  | Do.  | Drill tool.  |
| 158207 | 6-9-1984   | Vijay Govind Gokhale, Bombay Chemicaws Pvt. Ltd., 129, Mahatma Gandhi Road, Bombay-400 023. Maharashtra, India.  | A pre fabricated composite door or window frame.   |
| 162031 | 4-3-1986   | Do.  | A protective fibreglass support device for a burning type mosquito repellent coil.                         |
| 148580 | 28-9-1978  | Brakes India Limited, Padi, Madras-600 050, Tamil Nadu, India.   | A brake fluid reservoir of a hydraulic braking system.   |
| 148974 | 28-9-1979  | Do.  | A self-operative device for adjusting the brake lining with respect to the brake drum of a braking system. |
| 149236 | 16-6-1980  | Do.  | An improved cam brake.   |
| 149241 | 5-4-1980   | Do.  | A pedal mechanism for a hydraulic brake system.  |
| 153829 | 25-10-1982 | Do.  | 5/ cam brake.  |
| 156335 | 19-10-1982 | Do.  | A dust cover for wheel cylinders of vehicle hydraulic brake.   |

| 1      | 2          | 3   | 4   |
|--------|------------|---|---|
| 147675 | 3-4-1978   | Erodhula Satyanarayana, 13-2-13, Moses House, Maharanipet, Visakhapatnam 530 002, Andhra Pradesh, India.  | Improvements in or relating to stoves.  |
| 144734 | 6-5-1975   | Girling Limited, King's Road, Tysely Birmingham 11, England.  | Brake pressure control valves.  |
| 145031 | 8-5-1975   | Do.   | Railway vehicle disc brakes.  |
| 158724 | 13-3-1984  | Hoechst Aktiengesellschaft-D-6230, Frankfurt am Main 80, F.R. of Germany.                                 | Apparatus for making red phosphorus.  |
| 150973 | 25-8-1981  | India Pistons Ltd: Huzur Gardens, Sembiam, Madras-600 001 Tamil Nadu, India.                              | A method of manufacturing compression rings and compression rings manufactured thereby. |
| 160246 | 5-4-1984   | I.S.C. Smelting Limited, 6 St. James's Square, London SW1Y 4 LD, England.                                 | An apparatus for dispersion of liquids in gases.  |
| 160594 | 3-4-1984   | IZUMI MASANIKO, 13-14, 2-Chome, Nishimagome, Oota-ku, Tokyo, Japan.                                       | Apparatus for cleaning the inside of a room.  |
| 158287 | 29-6-1984  | Karnataka Filters Private Limited, 14-A, Bommasandra, Industrial Area, Bangalore 562158-Karnataka, India. | A novel attachment for use with and propulsion of a cycle.                              |
| 141053 | 13-2-1975  | Lucas Industries Public Limited Co., Great King Street, Birmingham B 19, 2XF, England.                    | Improvements in disc brakes for rail vehicles.  |
| 142145 | 20-3-1975  | Do.   | Improvements in vehicle disc brakes.  |
| 162334 | 4-9-1984   | Do.   | Actuator assemblies for vehicle brakes.   |
| 152445 | 2-5-1985   | Do.   | Improvements in disc brakes.  |
| 142345 | 18-9-1974  | Do.   | Brake pressure control valves.  |
| 143076 | 25-10-1975 | Do.   | Improvements in actuator assemblies for vehicles brakes.                                |
| 146711 | 1-6-1976   | Do.   | Improvements in and relating to brake assemblies.                                       |
| 146712 | 1-6-1976   | Do.   | Improvements in and relating to brake assemblies.                                       |
| 146713 | 1-6-1976   | Do.   | Improvements in or relating to brakes.  |
| 146714 | 1-6-1976   | Do.   | Improvements in or relating to disc brakes.   |
| 148029 | 31-1-1978  | Do.   | Hydraulic braking systems for vehicle.  |
| 149294 | 5-7-1979   | Do.   | A servo booster assembly for a vehicle braking system.                                  |
| 149295 | 5-7-1979   | Do.   | A servo booster for a vehicle braking system.   |
| 149296 | 5-7-1979   | Do.   | A servo boosters assembly.  |
| 149297 | 5-7-1979   | Do.   | A Servo booster for a vehicle braking system.   |
| 149394 | 8-2-1980   | Do.   | A vehicle disc brake assembly.  |
| 149638 | 11-12-1979 | Do.   | A railway disc brake assembly.  |
| 159774 | 23-12-1983 | Do.   | Sliding caliper disc brake with pad support.  |
| 149798 | 29-10-1975 | Do.   | Brake actuating assembly for a vehicle braking system.                                  |
| 149834 | 19-9-1979  | Do.   | A disc brake assembly.  |
| 149835 | 9-1-1980   | Do.   | A friction pad assembly for rail vehicle brake.   |
| 150269 | 23-2-1981  | Do.   | A pin sliding caliper-disc brakes.  |

| 1      | 2          | 3  | 4   |
|--------|------------|--|---|
| 150356 | 17-11-1979 | Lucas Industries Public Limited Co.,<br>Great King Street, Birmingham B 19, 2XF,<br>England.       | Servo boosters for vehicle braking system.  |
| 150358 | 5-3-1980   | Do.  | A brake friction pad or shoe assembly.  |
| 150461 | 8-2-1980   | Do.  | A friction lining wear indicator for shoe drum<br>brake.  |
| 150531 | 19-3-1979  | Do.  | Improvements in disc brakes for railway vehicles  |
| 150635 | 9-1-1980   | Do.  | Vehicle load sensing arrangement.   |
| 150636 | 5-3-1980   | Do.  | Drum brake adjusters.   |
| 150673 | 7-7-1980   | Do.  | A piston assembly for hydraulic master cylinder.  |
| 150779 | 21-5-1980  | Do.  | Automatically adjustable shoe drum brake.   |
| 150822 | 9-2-1979   | Do.  | Improvements in fluid-pressure operated brake<br>for vehicles.  |
| 151352 | 21-5-1980  | Do.  | A brake having an automatic adjuster.   |
| 151873 | 7-4-1981   | Do.  | Master cylinder.  |
| 152181 | 23-2-1981  | Do.  | A servo booster for vehicle braking systems.  |
| 152469 | 1-4-1981   | Do.  | A method of manufacturing a master cylinder.  |
| 153873 | 5-8-1981   | Do.  | Master cylinder.  |
| 154071 | 22-12-1981 | Do.  | Friction pad assembly for use in a disc brake.  |
| 155601 | 15-10-1981 | Do.  | Vehicle drum brakes.  |
| 155604 | 4-12-1981  | Do.  | Automatic adjuster for a shoe drum brake and<br>shoe drum brake incorporating the same.   |
| 156336 | 20-4-1983  | Do.  | A disc for a vehicle disc brake.  |
| 156719 | 20-11-1982 | Do.  | Actuator for shoe-drum brake and a shoe-drum<br>brake incorporating such actuator.  |
| 157182 | 11-1-1983  | Do.  | Internal shoe drum brake.   |
| 157186 | 20-4-1983  | Do.  | A disc for a vehicle disc brake.  |
| 157190 | 16-5-1983  | Do.  | An automatic adjuster for a shoe drum brake   |
| 160399 | 18-5-1984  | Madavan Parthasarathy, No. 12 Old Trunk<br>Road, Pallavaram, Madras-600 043, Tamil<br>Nadu, India. | d system for drying of materials.   |
| 160627 | 18-5-1984  | Do.  | A water cooler.   |
| 158723 | 17-2-1984  | Mitsuboshi Belting Ltd., No. 1-21, Hamazoe-<br>Dori, 4-Chome, Nagata-ku, Kobe, Japan.              | Power-transmitting V-belt.  |
| 159224 | 17-2-1984  | Do.  | Power transmitting V-belt.  |
| 159226 | 18-2-1984  | Do.  | Method for manufacturing elongated cogged<br>V-belt.  |
| 159640 | 18-2-1984  | Do.  | Toothed rubber V-belt.  |
| 160496 | 6-3-1984   | Do.  | Heat exchanging device with heat exchanging<br>plates.  |
| 160482 | 30-3-1982  | Normalair-Garrett (Holdings) Ltd; Westland<br>Works, Yeovil, Somerset, England.                    | Molecular sieve type gas separation systems.  |
| 159658 | 15-3-1984  | Palitex Project-Company GmbH, Weeserweg<br>60, 4150 Krefeld 1, West Germany.                       | A thread pull-off aid of variable geometrical<br>configuration for the overhead drawing-off of<br>a thread from a creel bobbin. |
| 160376 | 11-6-1984  | Ristvedt-Johnson INC. 891 Fechanville Drive.<br>Mount, Prospect, Illinois 600561, USA.             | A coin sorter apparatus for receiving and<br>sorting.   |



| 1      | 2          | 3   | 4   |
|--------|------------|---|---|
| 159804 | 10-2-1984  | Shell Internationale Research Maatschappij B.V. Carel Van Bylandtlaan, 30, The Hague, The Nether Lands.     | Apparatus for transporting particulate material.                |
| 160132 | 21-2-1984  | Do.   | Apparatus for fractional distillation under vacuum.             |
| 160492 | 21-2-1984  | Do.   | Process and apparatus for fractional distillation under vacuum. |
| 160595 | 5-4-1984   | Do.   | Apparatus for separating mixtures of liquid and gas.            |
| 149184 | 14-11-1979 | Shroff Pillappa Venkatasubbiah, 12, Thimmaraya Setty Lane, Nagarthapet Cross, Bangalore, 560002, Karnataka. | An apparatus for discharging liquid in measured quantity.       |
| 159715 | 4-12-1984  | Societe Francaise Hoechst, 3, Avenue du General de Gaulle, 92800, Puteaux, France.                          | A process for making decortica hard seeds.                      |
| 160372 | 28-5-1984  | Surya Gears, Jawan's Bhawan, 27 Traveller's Bungalow Road, Coimbatore 641018, India.                        | A single motor multispeed drive for ring frames.                |
| 156230 | 12-2-1982  | T.I. Cycles of India Limited, 28 Rajaji Road, Madras-600 001, India.  | An adjustable H, bar for a bicycle.                             |
| 148455 | 16-6-1979  | Tube Investments of India Ltd., 28 North Beach Road, Madras-600 001, India.                                 | A device for converting a bicycle into a prime mover.           |
| 148466 | 31-7-1978  | Do.   | A metallic light weight structural member.                      |
| 149616 | 19-7-1979  | Do.   | A pump for being driven by a bicycle.                           |
| 156708 | 27-5-1982  | Tube Investments of India Limited, Tiam House, 28, Rajaji Road, Madras-600 001, Tamil Nadu, India.          | A shock absorber for the front wheel of a bicycle.              |
| 158018 | 18-1-1983  | Do.   | A seat shock absorber for two wheeled vehicle.                  |
| 144409 | 19-8-1976  | VST INDUSTRIES LIMITED, Azamabad, Hyderabad-500 020, Andhra Pradesh.  | Improvements in or relating to blanks for cartons.              |

## COMMERCIAL WORKING OF PATENTED INVENTIONS

## CHEMICAL ENGINEERING LIST-I

The following patents in the field of Chemical Engineering Industry are not being commercially worked in India as admitted by patentees in the statements filed by them under section 146(2) of the Patents Act, 1970 in respect of Calendar year 1988 generally on account of want of request for licences to work the patented invention. Persons who are interested to work the said patents commercially may contact the patentees for the grant of a licence for the purpose.

| Patent No. | Date of Patent | Name & Address of the Patentee  | Title of the invention  |
|------------|----------------|---|---|
| 1          | 2              | 3   | 4   |
| 146879     | 5-11-1976      | Ahmedabad Textile Industry's Research (ATIR) P.O. Polytechnic, Ahmedabad 380 015, Gujarat, India. | Process of obtaining dyeing or printing effects on fabrics.               |
| 149098     | 17-3-1979      | Do.   | An improved process for imparting flame retardancy to cellulosic fibres.  |
| 154711     | 30-4-1982      | Hindustan Ciba-Geigy Ltd., Aarey Road, Goregaon East, Bombay-400 063, Maharashtra, India.         | Process for the manufacture of novel guanine derivatives.                 |
| 155606     | 22-1-1983      | Do.   | A novel process for the preparation of 5-aralkyl-2, 4-diaminopyrimidines. |
| 155707     | 22-1-1983      | Do.   | A novel process for the manufacture of 5-aralkyl-2, 4-diaminopyrimidines. |

| 1      | 2          | 3  | 4   |
|--------|------------|--|---|
| 158780 | 18-1-1985  | Hindustan Ciba-Geigy Ltd. 14, J. Tata Road, Bombay-400 020, Maharashtra, India.          | A process for the preparation of Benzimidazole carbamates having pharmacological properties.  |
| 159785 | 26-7-1985  | Do.  | A process for the preparation of novel benzazole derivatives and their salts.   |
| 146527 | 28-4-1977  | Hindustan Lever Ltd. 165-166 Hindustan Lever House, Backbay Reclamation, Bombay-400 020. | A method of purifying perfumery materials.  |
| 146699 | 12-1-1977  | Do.  | An antiperspirant composition.  |
| 147005 | 12-10-1976 | Do.  | Heavy duty detergent composition.   |
| 147013 | 8-9-1977   | Do.  | Process of refining triglyceride oils.  |
| 147266 | 10-2-1978  | Do.  | Deodorant detergent composition.  |
| 147286 | 15-2-1978  | Do.  | Preparation of allylic terpenic esters.   |
| 147448 | 4-8-1978   | Do.  | Process for improving colour and removing undesirable odour of soap.  |
| 147598 | 15-2-1978  | Do.  | A method of purifying allylic tertiary esters by distillation.  |
| 147962 | 15-5-1978  | Do.  | A process for making particular detergents compositions.  |
| 148180 | 15-1-1979  | Do.  | Process for the preparation of alkyl benzene mono-sulphonic acid.   |
| 148996 | 24-4-1979  | Do.  | Synergistic compositions for promoting hair growth.   |
| 149583 | 10-7-1979  | Do.  | A method of extracting n-paraffins (Wax) from mineral oil containing n-paraffins.   |
| 149734 | 26-2-1979  | Do.  | Process for preparation of synthetic fatty acid soap from paraffins.  |
| 149765 | 9-1-1979   | Do.  | Deodorant detergent composition and process of preparing the same.  |
| 150018 | 27-11-1979 | Do.  | A process for making an improved dimensionally stable detergent bar.  |
| 150029 | 27-11-1979 | Do.  | A process for making an improved dimensionally stable detergent bar.  |
| 150204 | 24-7-1980  | Do.  | A process for making plant growth nutrient/stimulant.   |
| 150249 | 20-3-1979  | Do.  | Non-germicidal deodorant toilet soap bar and process for preparing the same.  |
| 151014 | 21-6-1979  | Do.  | A process for obtaining basic aluminium halide such as chloride, bromide, or iodide having improved antiperspirant properties.  |
| 151317 | 29-1-1981  | Do.  | Process for the manufacture of water soluble alkali metal salts or sulphonated alkyl esters of long chain fatty acids.  |
| 151322 | 18-1-1980  | Do.  | Liquid duty dishwashing liquid detergent compositions.  |
| 151711 | 6-7-1981   | Do.  | A process for preparing hardened and dehydroxylated castor fatty acid feed stock.   |
| 152715 | 4-9-1981   | Do.  | A method for preparing non-edible dehydroxylated short chain (C <sub>1</sub> to C <sub>4</sub> ) esters of hardened castor acids for use in soap making, lubricants and paints. |

| 1      | 2          | 3   | 4  |
|--------|------------|---|--|
| 152722 | 8-7-1980   | Hindustan Lever Ltd. 165-166 Hindustan Lever-House, Backbay Reclamation, Bombay-20. | Process for producing a heteropolysaccharide.  |
| 153988 | 6-8-1980   | Do.   | Synergistic deodorant compositions.  |
| 153989 | 6-8-1980   | Do.   | Synergistic Deodorant composition.   |
| 153990 | 4-9-1981   | Do.   | Method of deoiling of slack waxes and the deoiled slack wax obtained thereby.  |
| 153991 | 15-9-1980  | Do.   | A synergistic liquid dish washing detergent composition for washing plates, dishes and saucapans.                                    |
| 153992 | 17-3-1982  | Do.   | Method of upgrading linalyl acetate by removing chlorides from impurities.   |
| 154319 | 30-10-1980 | Do.   | A process for preparing an adjunct for use in the manufacture of a detergent powder.   |
| 154705 | 12-1-1981  | Do.   | A process for preparing spray-dried detergent powders and detergent powders so prepared.   |
| 154776 | 7-2-1981   | Do.   | Process for the manufacture of calcium soap.   |
| 154777 | 7-2-1981   | Do.   | A process for the preparation of an alkali metal of an organic carboxylic acid.  |
| 155041 | 9-4-1981   | Do.   | A detergent bar having halite material for washing in ultra-violet light.  |
| 155044 | 5-9-1981   | Do.   | A method of manufacturing built detergent bars of improved hardness.   |
| 155045 | 5-9-1981   | Do.   | A method of manufacturing built detergent bars of improved hardness.   |
| 155073 | 17-3-1982  | Do.   | Detergent bars having improved resistance to sogginess and reduced rate of wear.   |
| 155097 | 17-6-1981  | Do.   | Particulate, soap-based detergent composition.   |
| 155099 | 17-3-1982  | Do.   | A process for the preparation of acyloxymethyl derivative capable of being used as perfumery components from hydrocarbon by-product. |
| 155244 | 18-11-1982 | Do.   | A process of making soap.  |
| 155758 | 10-9-1981  | Do.   | A high internal phase water-in-oil emulsion and a process for preparing the same.  |
| 156181 | 21-12-1982 | Do.   | A bleaching composition comprising a peroxide compound and a heavy metal compound.   |
| 156193 | 29-5-1982  | Do.   | A process for the preparation of alkali metal isethionates from ethionic acid.   |
| 156362 | 2-9-1983   | Do.   | Process for regenerating conventional spent adsorbent used for refining fatty material.  |
| 156363 | 11-8-1982  | Do.   | Manufacture of acyl isothionates.  |
| 156365 | 16-10-1982 | Do.   | A method for washing fabrics in water containing calcium hardness and a detergent composition therefore.                             |
| 156389 | 26-7-1982  | Do.   | A synergistic detergent composition.   |
| 156577 | 24-7-1982  | Do.   | A synergistic detergent compositions.  |
| 156578 | 24-7-1982  | Do.   | Detergent composition.   |
| 156579 | 26-7-1982  | Do.   | A process for preparing detergent active sulphosuccinate compounds.  |

| 1      | 2          | 3   | 4  |
|--------|------------|---|--|
| 156587 | 10-11-1982 | Hindustan Lever Ltd, 165-166 Hindustan Lever House, Backbay Reclamation, Bombay-20. | An improved liquid abrasive cleaning composition.  |
| 157133 | 25-3-1983  | Do.   | An improved process for preparing superfatted soap bars having improved properties such as improved lather and reduced mush properties from conventional raw materials and soap thereby. |
| 157134 | 25-3-1983  | Do.   | An improved method of subjecting a soap containing material to a hardening process to obtain hard soap bar and soap bars obtained thereby.   |
| 157135 | 25-3-1983  | Do.   | An improved process for processing soap feed stocks to provide soap bars having reduced grittiness and soapbars obtained thereby.  |
| 157137 | 25-3-1983  | Do.   | An improved process for preparing soap bars having increased transparency and soap bars thereby obtained.  |
| 157143 | 5-5-1983   | Do.   | A process for the preparation of Nickel upon transition alumina catalysts.   |
| 157274 | 25-3-1983  | Do.   | An improved process for preparing soap bars having modified phases and soap bars obtained thereby.   |
| 157420 | 9-3-1984   | Do.   | Improved peroxide adduct containing bleach compositions.   |
| 158153 | 19-7-1984  | Do.   | An improved method of manufacturing detergent bar having uniform properties.   |
| 158157 | 10-11-1983 | Do.   | A liquid detergent composition having high foaming characteristics.  |
| 158159 | 10-11-1983 | Do.   | A liquid detergent composition having high foaming characteristics.  |
| 158201 | 11-6-1984  | Do.   | An improved process for the preparation of carboxyalkyl derivatives of polygalactomannans.   |
| 158390 | 18-8-1983  | Do.   | A liquid scouring cleanser composition.  |
| 158632 | 10-11-1983 | Do.   | A liquid detergent composition having improved foaming characteristics.  |
| 158636 | 16-12-1983 | Do.   | A built detergent bleach composition containing manganese compound which delivers manganese ions in aqueous solutions.   |
| 158637 | 16-12-1983 | Do.   | A built detergent bleach composition containing manganese compound which delivers manganese ions in aqueous solution.  |
| 158761 | 14-3-1985  | Do.   | Powder detergent compositions with modified sodium chloride.   |
| 158778 | 22-1-1985  | Do.   | A method for sulphonation of fatty acid esters.  |
| 158779 | 12-12-1983 | Do.   | A particulate solid detergent composition.   |
| 158784 | 7-3-1984   | Do.   | Processing of polysaccharides.   |
| 158785 | 4-3-1985   | Do.   | A process for the preparation of groundnut cake suitable as a component for animal food-stuff.   |
| 158786 | 4-3-1985   | Do.   | An improved process for the manufacture of 3, 4, 5-trimethoxybenzaldehyde.   |
| 158827 | 29-5-1982  | Do.   | A process for the preparation of surface active fatty acid ester of alkali metal isethionates.   |

| 1      | 2          | 3  | 4  |
|--------|------------|--|--|
| 159778 | 19-1-1984  | Hindustan Lever Ltd. 165-166 Hindustan Lever House, Backbay Reclamation, Bombay-20.                                    | A process for the manufacture of a detergent active dialkyl sulphosuccinate mixture.               |
| 159933 | 15-10-1984 | Do.  | Process for preparation of transparent detergent bars.   |
| 159938 | 6-11-1984  | Do.  | A method of preparing manganese adjuncts for use as bleach catalyst.                               |
| 159969 | 27-6-1985  | Do.  | A process for preparing a plant growth nutrient composition.                                       |
| 159974 | 25-4-1984  | Do.  | Foaming aqueous liquid detergent composition.  |
| 160006 | 25-9-1984  | Do.  | A stable gas entrained toothpaste having increased viscosity and fluffy appearance.                |
| 160030 | 24-7-1982  | Do.  | A process for the preparation of detergent compositions.   |
| 160031 | 24-7-1982  | Do.  | A synergistic detergent composition.   |
| 160645 | 14-3-1985  | Do.  | Improved method of preparing modified sodium chloride for use in powder detergent compositions.    |
| 160861 | 4-12-1984  | Do.  | Alkaline built detergent bleach composition.   |
| 160862 | 4-12-1984  | Do.  | Alkaline built detergent bleach compositions.  |
| 161099 | 23-11-1984 | Do.  | Detergent compositions.  |
| 161100 | 29-1-1986  | Do.  | A process for the manufacture of aluminium fluoride from ammonium fluoride.                        |
| 161103 | 20-12-1984 | Do.  | Process for preparing a transition metal silicate catalyst.  |
| 161104 | 3-12-1985  | Do.  | Improvements in or relating to process for the preparation of acetylindans.                        |
| 161109 | 28-1-1985  | Do.  | A method of manufacturing fatty acid (C8-C22) ester (C <sub>1</sub> -C <sub>4</sub> ) sulphonates. |
| 161111 | 7-6-1985   | Do.  | Particulate built detergent compositions.  |
| 161316 | 29-1-1986  | Do.  | A process for recovering fluorine value from sodium fluorosilicate.                                |
| 162417 | 5-7-1985   | Do.  | Process for the preparation of Nickel/alumina catalyst.  |
| 162418 | 5-7-1985   | Do.  | Process for the preparation of Nickel/alumina/silicate catalysts.                                  |
| 162632 | 9-5-1985   | Do.  | Detergent compositions.  |
| 162633 | 9-5-1985   | Do.  | Homogeneous foaming detergent composition in gel form.   |
| 162637 | 2-9-1985   | Do.  | An improved process for the manufacture of built detergent bars.                                   |
| 158767 | 12-12-1984 | Jaysynth Dychem Pvt. Ltd. E-16 Everest, Tardeo Road, Bombay-400 084, Maharashtra, India.                               | A novel process for the preparation of novel green reactive dyes.                                  |
| 154778 | 27-2-1981  | The Dharausi Morarji Chemical Co. Ltd. 317-21, Dr. Dadabhoy Naoroji Road, Bombay-400 001, State of Maharashtra, India. | An improved process for manufacture of phosphoric acid and gypsum from rock phosphate.             |

| 1      | 2          | 3  | 4  |
|--------|------------|--|--|
| 159222 | 7-2-1984   | Alban Putz, Hellgasse 10, 5456 Rheinbrohl, Federal Republic of Germany.  | Method of manufacturing a die-casting injection moulding mould and a mould manufactured.   |
| 160131 | 18-2-1984  | Andhra Oil & Cake Products Ltd. 43-20-25 A, Venkatajunagar, Dondaparthy, Visakhapatnam 530016, Andhra Pradesh, India.                              | Process for the production of calcium oxid or quicklime from powdered lime sludgs.         |
| 148853 | 25-4-1980  | Bangaru Venkata Ramalakshi Narayana. 18-5-11 Bondadavari Street. Palakol-534260, West Godavari, Dist. A.P.   | An insect repellent candle and a method of manufacturing such candle.                      |
| 159600 | 21-3-1984  | Chuo Kagaku Co. Ltd. 3-1, 3-Chome, Miyaji Kounosu-shi, Saitama-ken, Japan.   | A process for producing a resin foam by aqueous medium.                                    |
| 159709 | 8-3-1984   | FCN Srl, Via 5 Bosco 3, Treviglio, Bergamo, Italy & Alphatime Ltd, of St. Peter House, 119 High Street, Berkhamsted, Hertfordshire, Great Britain. | Process for the preparation of pharmaceutical compositions having antineoplastic activity. |
| 160591 | 31-3-1984  | Granulite Ltd. Millbuck House, Corporation Street, Rugby, CV21 2DW, England.   | A process for the manufacture of building materials.                                       |
| 160411 | 23-3-1984  | Hoechst Aktiengesellschaft, D-6230 Frankfurt am Main 80, F.R.G.  | Process and apparatus for making phosphorus pentoxide with utilization of reaction heat.   |
| 160622 | 17-4-1984  | Hoechst Aktiengesellschaft, D-6230 Frankfurt am Main 80 F.R.G.   | Process for making phosphorus pentoxide with utilization of the reaction heat.             |
| 147264 | 9-3-1978   | Kontiki Chemicals & Pharmaceuticals Pvt. Ltd. A.K. Office Bldgs. Mill Road, Baliapatam, Kerala State, India.                                       | Process for the preparation of coir derivative.  |
| 147307 | 8-1-1979   | Do.  | Process for preparing derivatives from coir husks.   |
| 147418 | 9-3-1978   | Do.  | A process for preparing an improved adhesive substance.                                    |
| 147937 | 24-1-1979  | Kontiki Chemicals & Pharmaceuticals Pvt. Ltd. A.K. Office Bldg., Baliapatam, Cannanore-670 010, Kerala.  | Process for the production of cellulose.   |
| 154070 | 4-6-1982   | Do.  | Process for the production of heavy metal ion adsorbent.                                   |
| 154863 | 20-1-1981  | Do.  | Improvements in or relating to aminoplastic synthetic resin adhesives.                     |
| 158416 | 12-10-1984 | Do.  | Process for the preparation of a colouring matter from coconut shell.                      |
| 158230 | 10-8-1984  | Monsanto Company, 800 North Lindbergy Boulevard, St. Louis, Missouri 63167, U.S.A.   | Process for preparing 2-6 substituted pyridine compounds.                                  |
| 160125 | 10-8-1984  | Do.  | A process for preparing substituted dihydropyridine isomers.                               |
| 159598 | 22-7-1981  | Stamicarbon B.V., P.O. Box 10,6160 MC Geleen, The Netherlands.   | Process for the preparation of copolymers of ethylene with at least one other 1-alkene.    |
| 160416 | 24-5-1984  | The Texas A& M University System, College Station, Texas 77843, U.S.A.   | Method for producing a selected polypeptide.   |

## RENEWAL FEES PAID

|        |        |        |        |        |        |        |
|--------|--------|--------|--------|--------|--------|--------|
| 146167 | 147456 | 147791 | 147965 | 149513 | 149548 | 149809 |
| 149811 | 149930 | 150297 | 150935 | 151024 | 151059 | 151609 |
| 151860 | 152099 | 152496 | 152826 | 153408 | 153883 | 154232 |
| 154256 | 154458 | 154609 | 154890 | 155575 | 156098 | 157317 |
| 157342 | 157613 | 157614 | 157852 | 157854 | 158199 | 158273 |
| 158450 | 158501 | 158545 | 159426 | 169444 | 159629 | 159663 |
| 159687 | 160962 | 161016 | 161116 | 161340 | 161601 | 161631 |
| 161728 | 161742 | 161982 | 162002 | 162023 | 162148 | 162160 |
| 162657 | 163197 | 163669 | 163701 | 163703 | 164211 | 164214 |
| 164220 | 164336 | 164361 | 164363 | 164365 | 164366 | 164368 |
| 164369 |        |        |        |        |        |        |

## RESTORATION PROCEEDINGS

Notice is hereby given that an application for restoration of Patent No. 159830 dated the 14th March 1983 made by Dr. Binod Kumar Varma on the 17th February 1989 and notified in the Gazette of India, Part III, Section 2 dated the 17th June 1989 has been allowed and the said patent restored.

*Name Indexes of applications for Patents for the month of December, 1988 (Nos. 988/Cal/88 to 1076/Cal/88, 323/Bom/88 to 352/Bom/88, 859/Mas/88 to 934/Mas/88 and 1051/Del/88 to 1175/Del/88).*

| Name | Appln. No. |
|------|------------|
|------|------------|

## A

AVL Gesellschaft Fur Verbrennungs-Kraft-maschinen und messtechnik MBH.—1060/Del/88.

Acme Resin Corporation.—899/Mas/88, 907/Mas/88.

Alcan International Limited.—1123/Del/88, 1161/Del/88.

Allied Signal Inc.—1077/Del/88, 1137/Del/88.

Altrack Ltd.—882/Mas/88.

American Coil Currency. Equipment Corporation.—1114/Del/88.

American Standard Ind.—917/Mas/88, 918/Mas/88.

American Telephone & Telegraph Co.—894/Mas/88.

Ammonia Casale S.A.—916/Mas/88.

Appropriate Technology Development Association.—1118/Del/88.

Arctic Ice, Inc.—1059/Cal/88.

Armco Advanced Materials Corporation.—1075/Cal/88.

Atochem.—895/Mas/88, 900/Mas/88.

## B

BBC Brown Boveri AG.—885/Mas/88.

Balakrishnan, V.—891/Mas/88.

Banque De France.—1126/Del/88.

Belorussky Politekhichesky Institut.—994/Cal/88, 1053/Cal/88, 1138/Del/88, 1139/Del/88.

Benesh, A. H.—1032/Cal/88.

Bereuter, H.—1013/Cal/88.

Bharat Heavy Electricals Ltd.—1119/Del/88.

Biacchi.—1000/Cal/88.

Boots Co. (India) Ltd. The.—335/Bom/88, 336/Bom/88, 337/Bom/88, 338/Bom/88, 339/Bom/88.

Borden (U.K.) Ltd.—919/Mas/88.

## C

C.S.P.A.—1174/Del/88.

C.S.R.L.—1000/Cal/88.

Carrier Corporation.—993/Cal/88.

## Name

## Appln. No.

## C—Contd.

Central Silk Technological Research Institute, The.—878/Mas/88.

Chembon Ltd.—1028/Cal/88.

Chattopadhyay, A.—1006/Cal/88, 1007/Cal/88.

Chaudhuri, P. B.—1044/Cal/88.

Chopra, M.—1154/Del/88.

Chronar Corp.—1172/Del/88.

Ciba-Giegy AG.—1145/Del/88.

Co Artz.—1112/Del/88.

Colgate Palmolive Co.—1143/Del/88.

Commonwealth Scientific & Industrial Research Organisation.—1026/Cal/88, 1148/Del/88.

Compagnie De Raffinage Et De Distribution Total France S.A.—1052/Cal/88, 1072/Cal/88.

Compak Systems Ltd.—1048/Cal/88, 1049/Cal/88.

Council of Scientific & Industrial Research.—1050/Del/88, 1051/Del/88, 1052/Del/88, 1053/Del/88, 1061/Del/88, 1062/Del/88, 1070/Del/88, 1071/Del/88, 1102/Del/88, 1103/Del/88, 1104/Del/88, 1105/Del/88, 1106/Del/88, 1107/Del/88, 1108/Del/88, 1109/Del/88, 1110/Del/88, 1128/Del/88, 1129/Del/88, 1130/Del/88, 1131/Del/88, 1132/Del/88, 1133/Del/88, 1134/Del/88, 1135/Del/88, 1155/Del/88, 1156/Del/88, 1157/Del/88, 1158/Del/88, 1168/Del/88, 1169/Del/88, 1170/Del/88, 1171/Del/88.

## D

Dartnall Engineering & Innovation Pty. Ltd.—934/Mas/88.

Degussa Aktiengesellschaft.—1021/Cal/88.

Desai, M. H.—329/Bom/88.

Deutsche Vöest-Alpine Industrieanlagenbau GmbH, (Formerly Korf Engineering GmbH).—1008/Cal/88.

Director Police Telecommunications.—1066/Del/88.

Dolgoft, E.—1175/Del/88.

Deutsche Vöest-Alpine Industrieanlagenbau GmbH, (Formerly USSR).—1018/Cal/88.

Doshi, R.T.—351/Bom/88.

Duriron Co. The.—990/Cal/88.

Dyachkov, V. A.—1144/Del/88.

Dyakonov, J. D.—1144/Del/88.

Dwivedi, P.—1163/Del/88.

## E

Elf France.—1115/Del/88.

E.I. Du Pont De Nemours & Co.—1029/Cal/88, 1040/Cal/88, 1060/Cal/88.

E. R. Squibb & Sons, Inc.—1149/Del/88.

Electrolux Northern Ltd. (Formerly-known as Flymo—Ltd.).—1019/Cal/88.

Emitec Gesellschaft Fur Emission stechnologie MBH.—1057/Cal/88.

Energy Conversion Devices, Inc.—1141/Del/88.

Engelhard Corporation.—1041/Cal/88, 1042/Cal/88, 1043/Cal/88.

Engelhard De Meern B.V.—888/Mas/88.

Ethyl Corporation, 1142/Del/88.

| Name   | Appln. No. | Name  | Appln. No. |
|--|------------|---|------------|
| E—Contd.   |            | I   |            |
| Ethyl Corporation.—1142/Del/88.  |            | ICI Australia Ltd.—1148/Del/88.   |            |
| Europa Metalli, LMI S.p.A.—1136/Del/88.  |            | Indian Institute of Technology.—862/Mas/88.   |            |
| Exxon Research & Engineering Co.—1088/Del/88, 1089/Del/88, 1090/Del/88, 1091/Del/88, 1092/Del/88, 1093/Del/88, 1094/Del/88, 1095/Del/88, 1096/Del/88, 1197/Del/88, 1098/Del/88, 1099/Del/88. |            | Indo Gulf Explosives Ltd.—1150/Del/88.  |            |
| F  |            | Inspector General Communication B.S.F.—1065/Del/88.   |            |
| FMC Corporation.—924/Mas/88, 925/Mas/88.   |            | Institutet for Verkstadsteknisk Forskning.—863/Mas/88.  |            |
| FMI Full mold International GmbH.—1062/Cal/88.   |            | Institut Mekhaniki Metallopolimernykh Sistem Akademii Nauk Belorusskoi SSR.—1001/Cal/88, 1034/Cal/88.   |            |
| Ferring B.V.—875/Mas/88.   |            | Ivano-Frankovsky Institut Nefti I Gaza.—1056/Cal/88.  |            |
| Filtra Materials Research Pvt. Ltd.—331/Bom/88.  |            | J   |            |
| Firestone Tire & Rubber Co., The.—1083/Del/88.   |            | Joseph, I. C.—874/Mas/88.   |            |
| Fosco International Ltd.—873/Mas/88.   |            | Jung, W.S.—866/Mas/88.  |            |
| Fosroc International Ltd.—1068/Del/88.   |            | Juridical Foundation the Chemo-Sero-Therapeutic Research Institute.—906/Mas/88.   |            |
| Franz., H.—996/Cal/88.   |            | K   |            |
| Fratelli Lamberti S.p.A.—1065/Cal/88.  |            | Kabushiki Kaisha Myukoma.—886/Mas/88.   |            |
| Fried Krupp Gesellschaft Mit Beschränkter Haftung.—1069/Cal/88.  |            | Kampen, W.H.—1061/Cal/88.   |            |
| Fuller Co.—1081/Del/88, 1113/Del/88.   |            | Karmakar, A. P.—1006/Cal/88, 1007/Cal/88.   |            |
| G  |            | Kedves, L.—1068/Cal/88.   |            |
| GEC Plessey Telecommunication Ltd.—864/Mas/88.   |            | Key Ocean Services, Inc.—1047/Cal/88.   |            |
| Gajanan, N. V.—344/Bom/88.   |            | Klinger AG.—1055/Cal/88.  |            |
| General Motors Corporation.—896/Mas/88.  |            | Kljuev, V. T.—1144/Del/88.  |            |
| G—Contd.   |            | Kornbarm, S.—1075/Del/88.   |            |
| Geshwind, D. M.—1084/Del/88, 1086/Del/88, 1087/Del/88.   |            | Krupp Koppers GmbH.—1014/Cal/88, 1015/Cal/88, 1024/Cal/88, 1025/Cal/88.   |            |
| Ghoshal, N. C.—1006/Cal/88, 1007/Cal/88.   |            | Kumar, T. S. Dr.—932/Mas/88.  |            |
| Ginwalla, A. P. Mr.—332/Bom/88.  |            | Kurgansky Nauchno-Issledovatel'sky Institut Experimentalnoi Kurgansky Nauchno-Issledovatel'sky Institut Experimentalnoi I Klinicheskoi Ortopedii I Travmatologii.—1030/Cal/88, 1046/Cal/88. |            |
| Gopison, M.—909/Mas/88.  |            | Kuzmin, M. F.—1144/Del/88.  |            |
| Goawamy, S.—997/Cal/88.  |            | Kuznetsova, V. A.—1005/Cal/88.  |            |
| Gupta, A.—1173/Del/88.   |            | L   |            |
| Gupta, B. D.—1020/Cal/88.  |            | Laboratories Del Dr. Esteve S.A.—1165/Del/88.   |            |
| Gupta, B. Kr.—1152/Del/88, 1153/Del/88.  |            | L' Air Liquide, Societe Anonyme Pour L' Etude Et L' Exploitation Des Procédes Georges Claude.—1063/Del/88.  |            |
| Gupta, S. L.—1067/Del/88.  |            | Lanxide Technology Co. LP.—1009/Cal/88, 1010/Cal/88, 1054/Cal/88.   |            |
| Guy, Geudfrin.—1058/Del/88.  |            | La Telemecanique Electrique.—1100/Del/88.   |            |
| H  |            | Linde Aktiengesellschaft.—910/Mas/88.   |            |
| Hamlin Transmission Corporation.—903/Mas/88.   |            | Long Mile Rubber Co.—1082/Del/88.   |            |
| Hanko, L.—869/Mas/88.  |            | Lubrizol Corporation, The.—1031/Cal/88, 1122/Del/88, 1159/Del/88, 1160/Del/88.  |            |
| Haynes International, Inc.—879/Mas/88.   |            | Lucas Industries Public Ltd. Co.—892/Mas/88, 893/Mas/88.  |            |
| Henkel Kommanditgesellschaft auf Aktien.—902/Mas/88.   |            | M   |            |
| Hindustan Lever Ltd.—334/Bom/88, 340/Bom/88, 346/Bom/88, 347/Bom/88, 348/Bom/88, 349/Bom/88, 350/Bom/88.   |            | M B Group PLC.—861/Mas/88.  |            |
| Hitachi Ltd.—1002/Cal/88, 1003/Cal/88, 1011/Cal/88, 1012/Cal/88.   |            | M & T Chemicals Inc.—1080/Del/88, 1121/Del/88.  |            |
| Hoechst Aktiengesellschaft.—998/Cal/88, 999/Cal/88, 1067/Cal/88.   |            | Manjunatha, B. S.—897/Mas/88.   |            |
| Hoechst Celanese Corporation.—1037/Cal/88, 1038/Cal/88.  |            | Maschinenfabrik Reinhausen GmbH.—921/Mas/88.  |            |
| Hoechst India Ltd.—342/Bom/88.   |            | Maschinenfabrik Rieter AG.—887/Mas/88, 911/Mas/88, 912/Mas/88, 931/Mas/88.  |            |
| Hughes Aircraft Co.—1069/Del/88.   |            | Maschinenfabrik Sulzer-Burckhardt AG.—1124/Del/88.  |            |



| Name   | Appln. No. | Name  | Appln. No. |
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| <b>M</b>   |            | <b>S—Contd.</b>   |            |
| Mefina S.A.—860/Mas/88.  |            | Schuvert & Salzer Maschinenfabrik Aktiengesellschaft.—890/Mas/88, 905/Mas/88.   |            |
| Meuser-Werke GmbH.—904/Mas/88.   |            | Seshadri, K.—876/Mas/88.  |            |
| Michelin Recherche ET Technique S.A.—865/Mas/88.                         |            | Shah, S. H.—352/Bom/88.   |            |
| Minnesota Mining & Manufacturing Co.—880/Mas/88, 884/Mas/88, 913/Mas/88. |            | Sharina, B. A. V. K.—927/Mas/88, 928/Mas/88, 929/Mas/88.  |            |
| Mitsubishi Denki Kabushiki Kaisha.—870/Mas/88.                           |            | Shell Oil Co.—1167/Del/88.  |            |
| Mitsubishi Jukogyo Kabushiki Kaisha.—922/Mas/88.                         |            | Shet, G. V.—898/Mas/88.   |            |
| Mitsui Petrochemical Industries, Ltd.—1074/Del/88.                       |            | Singh, S. R. P.—1045/Cal/88.  |            |
| Mitsui Toatsu Chemicals.—992/Cal/88.                                     |            | Sinha, J. P.—1050/Cal/88, 1051/Cal/88.  |            |
| Mobil Oil Corporation.—923/Mas/88.                                       |            | Sir Padampat Research Centre.—1073/Del/88.  |            |
| Modern Balance Works.—1055/Del/88.                                       |            | Societe Anonyme Dite Intermotra.—991/Cal/88.  |            |
| Mohanlal H. Mrs.—908/Mas/88.   |            | Solmat Systems Ltd.—1004/Cal/88.  |            |
| Morpho-Systemes.—1023/Cal/88.  |            | Sood, B.—1146/Del/88.   |            |
| Moton Thiokol, Inc.—1140/Del/88.   |            | Sorokin, A. Y.—1005/Cal/88.   |            |
| Motorola Inc.—1056/Del/88, 1057/Del/88, 1064/Del/88, 1120/Del/88.        |            | Spandrel Establishment.—889/Mas/88.   |            |
| Mukhopadhyay, A. K. Dr.—1035/Cal/88.                                     |            | Spetsialnoc Konstruktorssko Tekhnologicheskoe Bjuro PO Izolyatoram I Armature VPO "Sojuzelektrosetizolyatsia".—1079/Del/88. |            |
| <b>N</b>   |            | Sree Chitra Tirunal Institute for Medical Science & Technology.—915/Mas/88.   |            |
| Naderi, M. T.—1063/Cal/88.   |            | Stamnicarbon B. V.—859/Mas/88.  |            |
| Naja International Inc.—1066/Cal/88.                                     |            | Standard Tin Works.—333/Bom/88.   |            |
| Narkhede, S.A.—330/Bom/88.   |            | Stanton PLC.1027—/Cal/88.   |            |
| Norsk Hydro a.s.—1111/Del/88.  |            | Stopinc AG.—1022/Cal/88.  |            |
| Norsolor.—1036/Cal/88.   |            | Stork Screens H. V.—930/Mas/88.   |            |
| <b>O</b>   |            | <b>T</b>  |            |
| Owens-Illinois, Inc.—920/Mas/88.   |            | Talwar, V.—988/Cal/88, 989/Cal/88.  |            |
| Oy, H.—1076/Cal/88.  |            | Tenneco Canada Inc.—1076/Del/88.  |            |
| <b>P</b>   |            | Texaco Development Corporation.—1070/Cal/88, 1071/Cal/88.   |            |
| PPG Industries, Inc.—1125/Del/88.  |            | Thaikattil, J. Dr.—877/Mas/88.  |            |
| Pannalal, N.—343/Bom/88.   |            | Thermatool Corporation.—1039/Cal/88.  |            |
| Paranjpe, P. N.—345/Bom/88.  |            | Townsend Controls Pty. Ltd.—868/Mas/88.   |            |
| Patralekh, K.—1058/Cl/88.  |            | Tushnev, M. N.—1144/Del/88.   |            |
| Pennwalt Corporation.—1074/Cal/88.                                       |            | <b>U</b>  |            |
| Pervushin, E. S.—1144/Del/88.  |            | U. O. P.—883/Mas/88, 1078/Del/88, 1117/Del/88, 1147/Del/88, 1162/Del/88.  |            |
| Piaggio.—1174/Del/88.  |            | Umayasky, V. A.—1144/Del/88.  |            |
| Price Pfister, Inc.—1151/Del/88.   |            | Uniroyal Chemical Co. Inc.—1166/Del/88.   |            |
| Procter & Gamble Co. The.—1101/Del/88.                                   |            | Uniroyal Goodrich Tire Co., The.—1116/Del/88.   |            |
| Prodeco S.P.A.—926/Mas/88.   |            | <b>V</b>  |            |
| <b>R</b>   |            | V. I. P. Industries Ltd.—328/Bom/88.  |            |
| Raman, N.S.I.K.—871/Mas/88, 933/Mas/88.                                  |            | Vaidyanathan, L. G. I.—914/Mas/88.  |            |
| Regents of the University of California, The.—872/Mas/88.                |            | Vakil, K. N.—1164/Del/88.   |            |
| Rolls-Royce PLC.—1127/Del/88.  |            | Varma, B. K. Dr.—1064/Cal/88.   |            |
| Rozenberg, M. E.—1005/Cal/88.  |            | Verlier, J.—901/Mas/88.   |            |
| <b>S</b>   |            | Versatronics Ltd.—881/Mas/88.   |            |
| SKW Trostberg Aktiengesellschaft.—1033/Cal/88.                           |            | Voesst-Alpine Stahl Donawitz Gesellschaft m.b.h.—995/Cal/88.  |            |
| Saini, G. C.—1073/Cal/88.  |            | Vologodsky Politeknicheskoy Institut USSR.—1018/Cal/88.   |            |
| Sarkar, D.—341/Bom/88.   |            | Vsesojuzny Nauchno-Issledovatel'sky proektnokonstruktorsky I tekhnologicheskoy akkumulyatorny Institut.—1059/Del/88.        |            |
| Schlumberger, E.—1017/Cal/88.  |            |   |            |
| Schlumberger, M.—1017/Cal/88.  |            |   |            |

| Name   | Appln. No. |
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| V—Contd.   |            |
| Vsesojuzny Nauchno-Issledovatel'sky i proektny Institut Mekhanicheskoi Obrabotki Poleznykh Iskopaemykh Mekhanobr.—1016/Cal/88. |            |

W

Westinghouse Brake & Signal Co. Ltd.—1085/Del/88.  
Whirlpool Corporation.—1054/Del/88 1072/Del/88.

Z

Zimpro Passabant Inc.—867/Mas/88.

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### स्वीकृत सम्पूर्ण विनिर्देश

एतद्वारा यह सूचना दी जाती है कि सम्बद्ध आवेदनों में से किसी पर पेटेंट अनुदान का विरोध करने के इच्छुक कोई व्यक्ति, इसके निर्गम की तिथि से 4 महीने या अग्रिम ऐसे अवधि जो उक्त 4 महीने की अवधि की समाप्ति के पूर्व पेटेंट नियम 1972 के तहत विहित प्रपत्र 14 पर आवेदित एक महीने की अवधि से अधिक न हो के भीतर कभी भी नियंत्रक, एकत्र को ऐसे विरोध की सूचना विहित प्रपत्र 15 पर दे सकते हैं। विरोध सम्बन्धी लिखित वस्तु; उक्त सूचना के साथ अथवा पेटेंट नियम, 1972 के नियम 36 में यथा विहित इसकी तिथि के एक महीने के भीतर ही फाइल किए जाने चाहिए।

"प्रत्येक विनिर्देश के संदर्भ में नीचे दिए वर्गीकरण, भारतीय वर्गीकरण तथा अन्तराष्ट्रीय वर्गीकरण के अनुरूप हैं।"

नीचे सूची गत विनिर्देशों की सीमित संख्या में मुद्रित प्रतियां; भारत सरकार बुक डिपो, 8 किरण संकर राय रोड, कलकत्ता में विक्रय होतु यथा समस उपलब्ध होगी। प्रत्येक विनिर्देश का मूल्य 2/- रु. है। (यदि भारत के बाहर भेजे जाएं तो अतिरिक्त डाक खर्च)। मुद्रित विनिर्देश की आपूर्ति

होतु मांग पत्र के साथ निम्नलिखित सूची में यथा प्रवर्णित विनिर्देशों की संख्या संलग्न रहनी चाहिए।

रूपांकन (चित्र आरेखों) की फोटो प्रतियां यदि कोई हों; के साथ विनिर्देशों की टंकित अथवा फोटो प्रतियों की आपूर्ति ट कार्यालय, कलकत्ता, द्वारा विहित लिप्यान्तरण प्रभार त कार्यालय से पत्र व्यवहार द्वारा सुनिश्चित करने के उपरांत की अदायगी पर की जा सकती है। विनिर्देश की पृष्ठ संख्या के साथ प्रत्येक स्वीकृत विनिर्देश के सामने नीचे वर्णित चित्र आरेख कागजों को जोड़कर उसे 4 से गुणा करके; (क्योंकि प्रत्येक पृष्ठ का लिप्यान्तरण प्रभार 4/- रु. है) फोटो लिप्यान्तरण प्रभार का परिकलन किया जा सकता है।

Int. CLASS : B 22 c 11/00 165691

A MOULDING SYSTEM FOR MAKING MOULD PARTS.

Applicant : DANSK INDUSTRI SYNDIKAT A/S, OF HERLEV HOVEDGADE 15-17, 2730 HERLEV, DENMARK.

Inventor : SOREN ERIK KNUDSEN.

Application No. 1/Cal/1987 filed January 01, 1987.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

### 77 Claims

A moulding system for making mould parts by compacting sand or other like material between a vertical squeeze plate (12) and a vertical swingable plate (8), forming movable end walls in the squeeze chamber (6), and where the swingable plate (8) swings away after compaction to allow mould part passage from the squeeze chamber by further advance movement of the squeeze plate (12), characterized in that the swingable plate (8) is journaled in a foremost yoke (4), which connects with a pull yoke (2) placed behind the squeeze chamber by means of a rigid frame structure parallel with the longitudinal axis of the chamber.

Compl. specn. 9 pages

Drg. 2 sheets

Int. CLASS : H 01 h 9/00

165692

AN ASSEMBLY IN OR FOR USE IN AN ELECTRICAL SWITCHING DEVICE.

Applicant : SIEMENS AKTIENGESellschaft, OF WITTELSBACHERPLATZ 2, D-8000. MUNCHEN 2, WEST GERMANY.

Inventor : WILLY SABISCH.

Application No. 102/Cal/1987 filed February 03, 1987.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

### 10 Claims

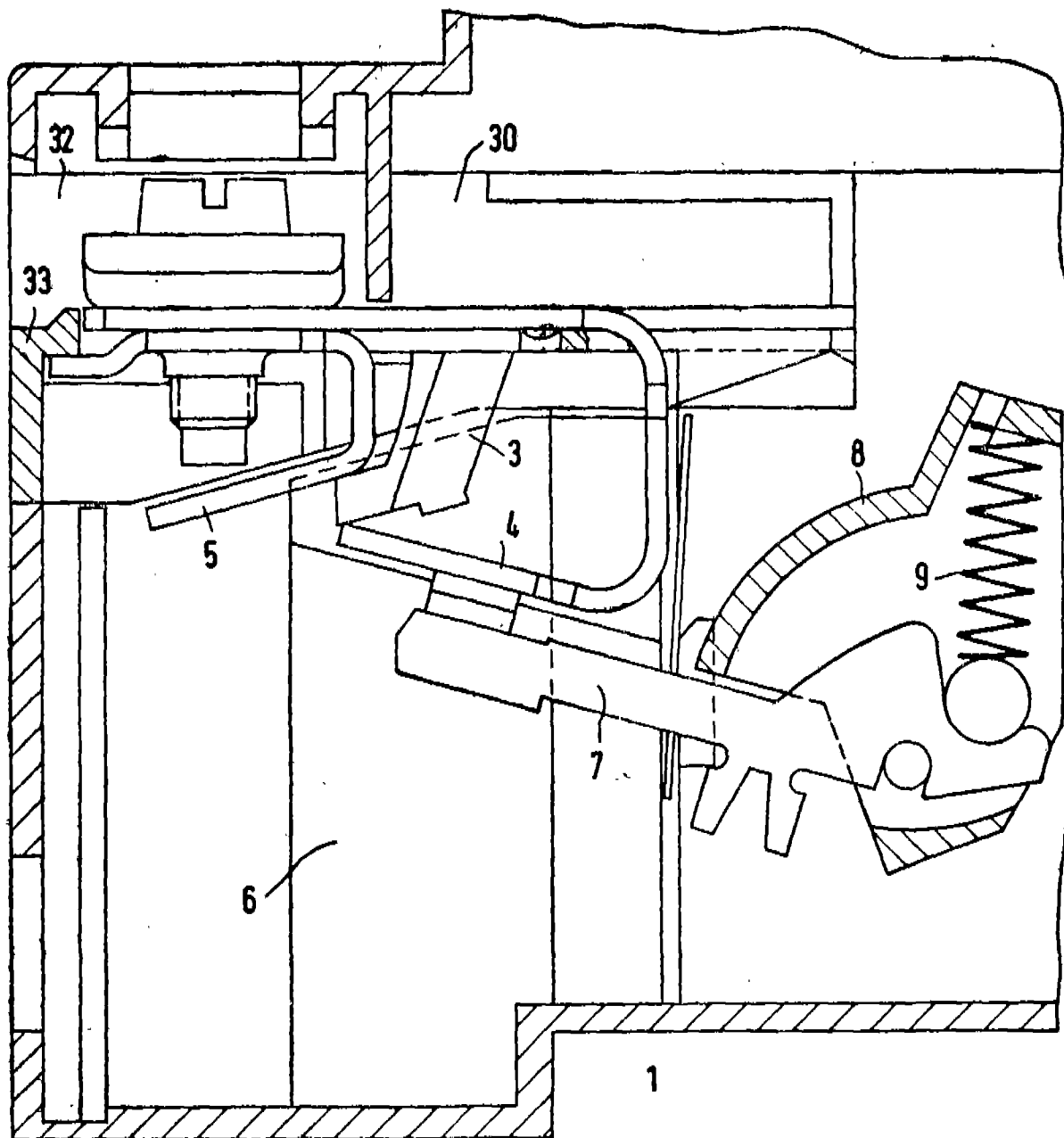
An assembly in or for use in an electrical switching device, the assembly including an electrically insulating structure having two parallel grooves facing one another, a contact piece which is intended for use as a fixed contact piece of the switching device and has a first limb, two opposed edges of which lie in the grooves and have been slid along them by movement of the contact piece in a first direction relative to the insulating structure, the first limb being joined by a connecting part to a second limb of the contact piece which is shorter than the first limb and extends away from the connecting part in the same general direction as does the first limb, the second limb serving, on its side remote from the first limb, for contact making, the assembly further including an arc splitter having a first leg adjacent the first limb of the contact piece, on the side of the first limb which is nearer the

second limb, and electrically connected to the first limb, the first leg of the arc splitter which extends away from the connecting piece in the same general direction as does the first leg, the first leg of the arc splitter having been inserted in a recess in the insulating structure by movement of the arc splitter in a second direction relative to the

insulating structure, the second direction being transverse to the first direction, the first leg carrying a screw-thread to receive a terminal screw and the first limb of the contact piece being formed with a thorough-going hole through which the terminal screw can pass.

Compl. specn. 11 pages

Drg. 2 sheets



Int. CLASS : F 16 t 1/48

165693

# STEAM TRAP OPERATION MONITORING DEVICE.

Applicant : TLV CO., LTD., OF 881 NAGASUNA, NOGUCHI-CHO, KAKOGAWA-SHI, HYOGO, 675 JAPAN.

Inventors : (1) YOSHIYASU FUJIWARA, (2) MASAO YONEMURA, (3) TAKESHI YOKOYAMA.

Application No. 155/Cal/1987 filed March 02, 1987.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

## 3 Claims

A steam trap operation monitoring device comprising :

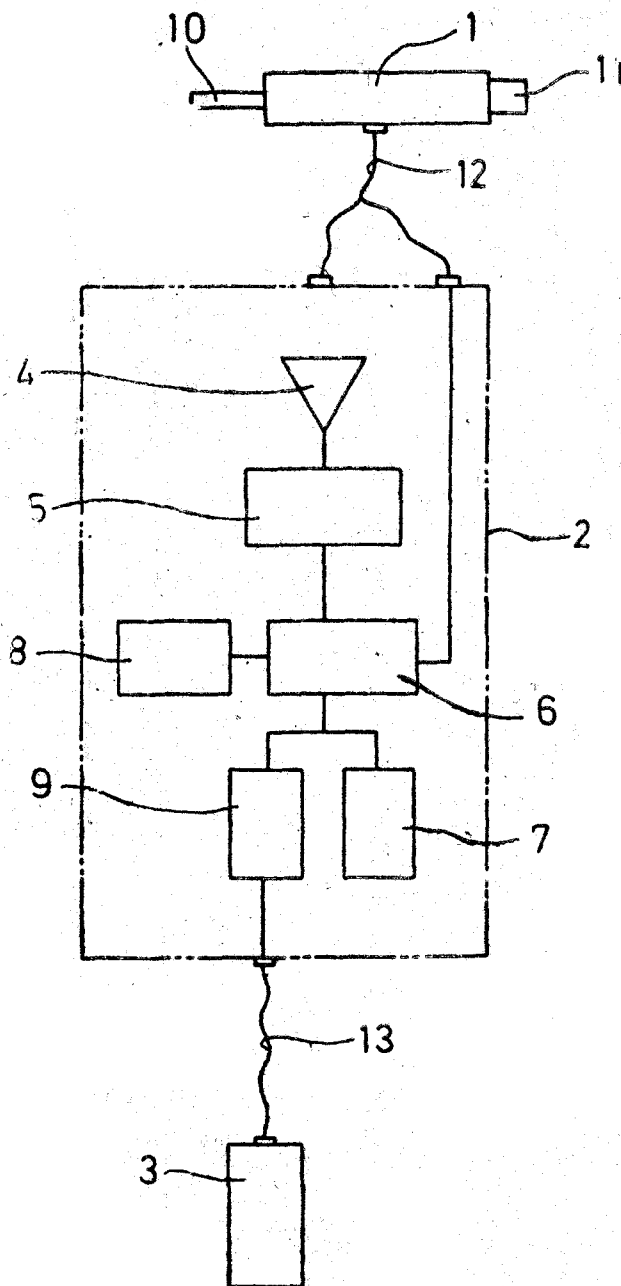
steam leakage detector means for measuring and storing data representing the operation of steam traps, and host computer means to which said data are transferred for storing said data, said host computer means operating to record and display the summation of leakage in a plurality of steam traps;

the totalization and analysis of leakage in terms of at least one of monetary cost and a rejection rate, and changes in each of said steam traps with time;

said steam leakage detector means comprising an operation detecting section for sensing parameters of a plurality of steam traps to generate analog signals;

an analog-to-digital converter connected to said operation detecting section for converting the analog signals to digital signals;

a microcomputer connected to said analog-to-digital converter for receiving the digital signals and for analyzing the digital signals to detect the presence of steam leaks in each steam trap based on the parameters sensed for each steam leaks trap and storage means connected to said micro-computer for storing data concerning the condition and change in condition of each steam trap with regard to steam leakage.



Compl. specn. 12 pages

Drg. 1 sheet

Int. CLASS : A 41 f 1/04 17/00

165694

A SLIDING CLASP FASTENER HAVING WOVEN SUPPORTING TAPES AND WOVEN-IN PREFABRICATED ROWS OF INTERLOCKING MEMBERS.

Applicant : OPTI PATENT, FORSCHUNGS-UND FABRIKATIONS AG., OF CH-8750 RIEDERN-ALLMEIND, SWITZERLAND.

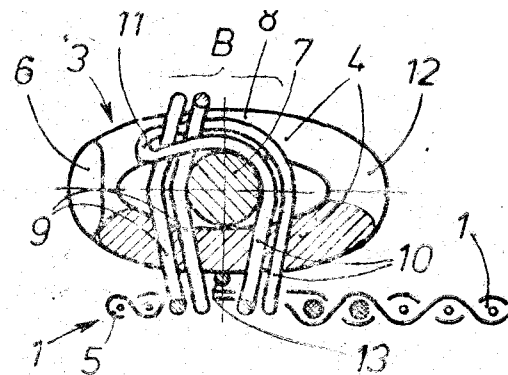
Inventors : HENNING HANSEN.

Application No. 261/Cal/1987 filed April 01, 1987.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

6 Claims

A sliding clasp fastener having woven supporting tapes and woven-in prefabricated rows of interlocking members each formed helically from a plastics monofilament, in which the interlocking members, seen in a projection on the plane of the sliding clasp fastener, have limbs superimposed on at least the interlock side, interlocking heads protruding beyond the edges of the supporting tapes, an inserted core attachment sections, each row of interlocking members is attached to the top face of its supporting tape by binding chain threads engaging the interlock side of each interlocking member and at least one wrapping thread engaging the attachment section, and the core and attaching them to the supporting tape, the binding chain threads are crossed over between successive interlocking members, and the wrapping threads pass round the binding chain threads in a loop between successive interlocking members, characterised in that the attachment section (8), seen in a projection on the plane of the sliding clasp fastener, are disposed in the middle of the interlocking members (3), some distance from the interlocking heads (6) but also some distance from rearward return loops (12), while the binding chain threads (9) are disposed in the supporting tapes (1) beneath the middle (B) of the interlocking members (3) and drawn on to the attachment sections (8) by the loops (11) of the wrapping threads (10) which pass partly round the attachment sections (8).



Compl. specn. 11 pages

Drg. 2 sheets

CLASS : 61-H

165695

Int. Cl. : D 21 p 5/18, 7/12.

A BLOW BOX FOR A DRYER.

Applicant : BELOIT CORPORATION, OF P.O. BOX 350, BELOIT, WISCONSIN 53511, U. S. A.

Inventor : GREGORY LYNN WEDEL.

Application No. 266/Cal/1987 filed April 02, 1987.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

17 Claims

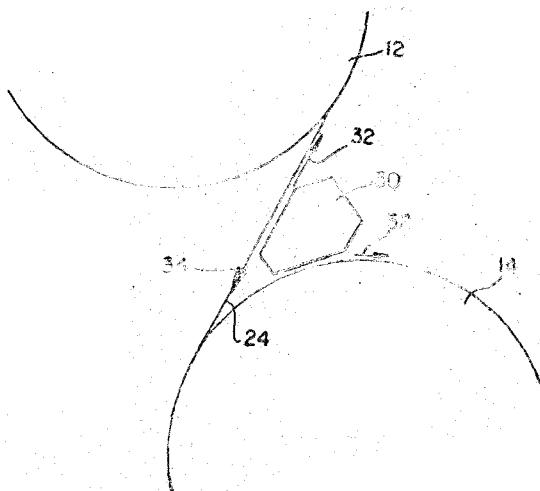
CLASS : 61-F

165696

A blow box disposed within a pocket defined by a web and felt travelling together from a first dryer to and around a second dryer and on to and around a third dryer, said blow box comprising in combination:

a wedge-shaped box extending from between the first and third dryers to adjacent the second dryer, said box being connected to a source of pressurized air for maintaining the web in close conformity with the felt when the web and felt diverge relative to the first dryer; and

said box defining an orifice disposed adjacent to the first dryer for directing pressurized air towards the first dryer and thereafter directing the air in a direction opposite to the direction of rotation of the first dryer such that the web is urged against the felt for inhibiting the tendency of the web to adhere to the first dryer when the felt diverges relative to the first dryer.



Compl. specn. 29 pages

Drg. 6 sheets

Int. Cl. : D 21 f 5/00.

PAPER WEB DRIER SECTION AND METHOD OF PAPER MANUFACTURED USING SAID DRIER.

Applicant : BELOIT CORPORATION, P.O. BOX 350, BELOIT, WISCONSIN 53511, U.S.A.

Inventor : DONALD ALEXANDER ELY.

Application No. 272/Cal/1987 filed April 03, 1987.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

10 Claims

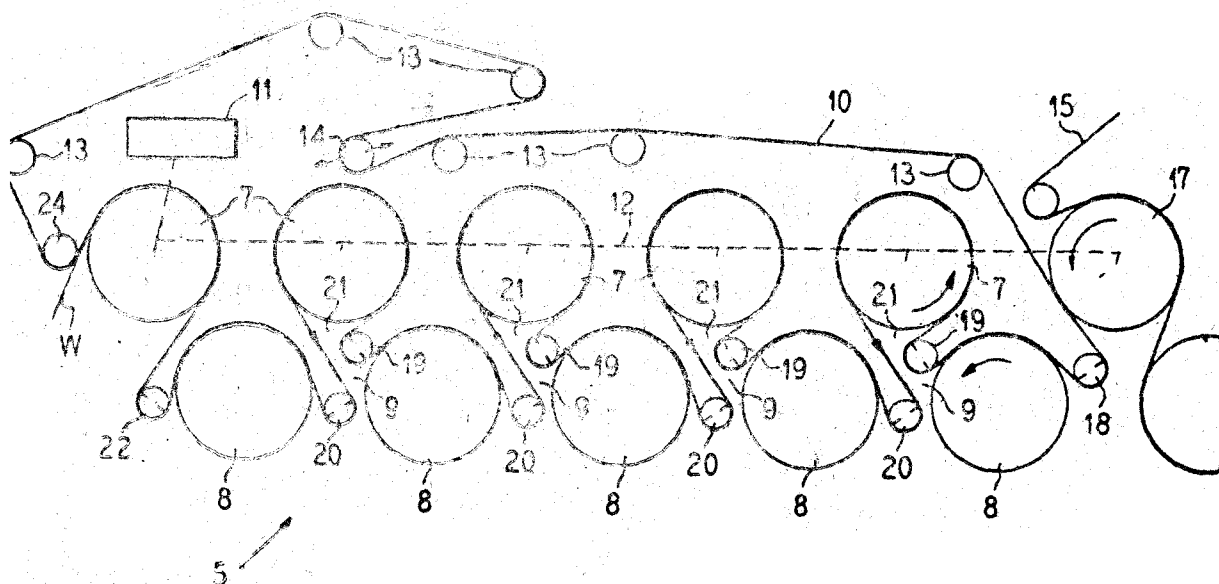
A paper web drier section having :

an upper horizontal tier of a plurality of rotary dryers spaced from one another less than the diameter of the dryers;

a lower horizontal tier of rotary dryers spaced from one another and adjacently spaced from said upper dryers, and with said upper dryers forming with the lower dryers respective generally triangular pockets;

an endless drier felt trained to run a paper web sinusously successively and in direct contact on the upper perimeter areas of said upper and lower dryers;

means for effecting running of all of said dryers and said felt in one direction; and a pair of felt rolls in each pocket for maximizing the wrap of the felt, and thereby the web, on the dryer perimeters, a first of said pair of felt rolls in each pocket located for controlling running of said felt and web from the lower dryer located at the on running of the pocket into said pocket and then in on running direction onto the upper dryer defining the pocket and a second of said pair of felt rolls in each pocket controlling running of the felt and web from the off running side of the upper dryer into the pocket and then onto the on running side of the lower dryer at the offrunning side of said pocket, and said second felt roll forming with the drier felt and said first felt roll a generally downwardly opening broke-receiving and ejection sub-pocket under said upper dryer and within said pocket.



Compl. specn. 10 pages

Drg. 1 sheet

CLASS : 129-Q

165697

Int. Cl. : B 23 k 35/40; C 23 f 13/00, 17/00.

INSTALLATION FOR ELECTROCHEMICAL CLEANING OF LONG MATERIALS, MAINLY WIRE, USED FOR WELDING.

Applicant : SLAVYANSKY FILIAL VSESOJUZNOGO NAUCHNO-ISSLEDOVATELSKOGO I PROEKTNO KONSTRUKTORSKOGO INSTITUTA METALLURGICHESKOGO MASHINOSTROENIA IMENI A.I. TSELIKOVA, OF SLAVYANSK, DONETSKOI OBLASTI, ULITSА KARPINSKOGO, 2A, USSR.

Inventors : (1) VLADIMIR IZRAILEVICH DUNAEVSKY, (2) ANATOLY YAKOVLEVICH ZANIN, (3) PAVEL MIKHAILOVICH KOVALENKO, (4) OLEG DONOVICH SHVARTS BURD, (5) NIKOLAI MIKHAILOVICH IGNATSEVICH, (6) GENNADY VASILIEVICH TURLUPOV, (7) ALEXANDR SERGEEVICH KOROT-

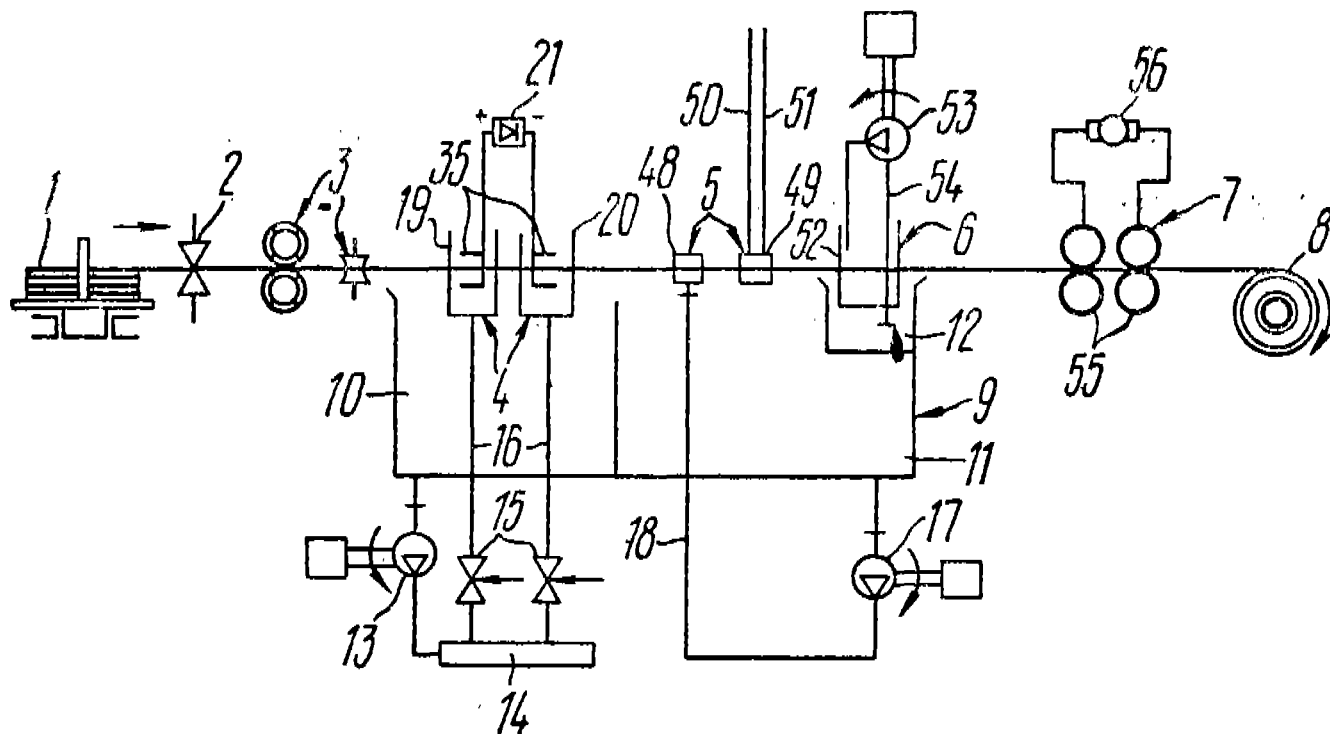
KY, (8) STANISLAV NIKOLAEVICH ANTONOV, (9) NIKOLAI NIKOLAEVICH GORDIENKO, (10) MIKHAIL GRIGORIEVICH IVANISCHEV, (11) BORIS PETROVICH MININ, (12) IOSIF MIRONOVICH LIVSHITS, (13) ALEXANDR MIKHAILOVICH REZNIK, 14. KONSTANTIN SERGEEVICH FILONOV.

Application No. 406/Cal/1987 filed May 21, 1987.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

## 11 Claims

An installation for electrochemical cleaning of long materials, mainly wire, used for welding, wherein installed in succession in the direction of movement of the wire under cleaning are at least one bipolar electrolyte-cavitation treatment unit comprising a cathode section and an anode section installed one after the other, the latter being essentially an electrolyte plasma generator, an arrangement for application of a protection and lubrication coating and an arrangement for drying of the cleaned wire.



CLASS : 165698

Int. Cl. : B 21 d 13/00.

# MACHINE FOR MAKING LONGITUDINAL CORRUGATIONS IN METAL SHEETS.

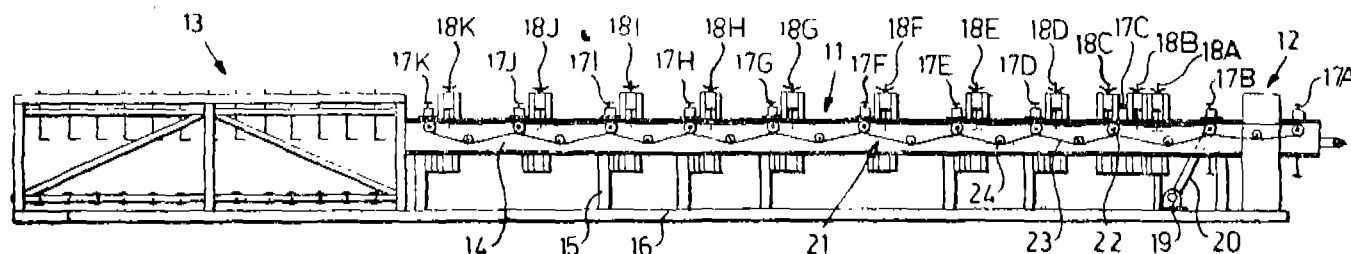
Applicant (1) TROND NILSEN, OF ENGERJORDET 19,1310 BLOMMENHOLM, NORWAY, AND (2) ERLING C. NORMANN, OF BJORKETUN 6, 7650 VERDAL, NORWAY.

Application No. 417/Cal/1987 filed May 25, 1987.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

## 11 Claims

A machine for making longitudinal corrugations in sheet material particularly of metal with stepwise folding/bending



Compl. specn. 19 pages

Drg. 4 sheets

over free-running rollers and counter-rollers, so that alternating longitudinal convex and concave corrugations are formed, characterized in that at each profiling step there are upward and downward forming rollers, these forming rollers can be individually adjusted laterally to the direction of corrugation ;

that separate from the forming rollers at least one set of drive rollers are located with corresponding counter-rollers, where both the drive rollers and counter-rollers can be adjusted laterally to the direction of corrugation ;

that all forming rollers which correspond to a ridge or a groove lie in one and the same straight plane, whilst equivalent points of contact between the sheet material and the forming rollers that form grooves, or ridges respectively, lie in a curved bent plane, whilst the points of contact between the drive rollers and the sheet material lie in a common, preferably horizontal plane.

Int. CLASS : C 07 c 31/12, 85/02

165699

# PROCESS FOR THE PRODUCTION OF L-2-AMINO-4-(HYDROXYMETHYLPHOSPHINYL)-BUTYRIC ACID.

Applicant : MEIJI SEIKA KAISHA LTD., OF 4-16, KYOBASHI 2-CHOME, CHUO-KU, TOKYO, JAPAN.

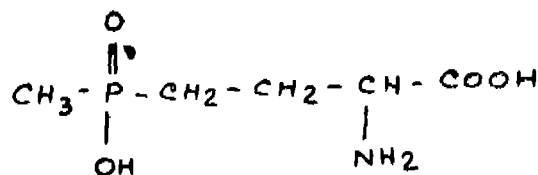
Inventors : (1) SATOSHI IMAI; (2) TAKESHI MURAKAMI; (3) OSAMU HARA; (4) SHINJI MIYADO; (5) YOICHI KUMADA; (6) HIROYUKI ANZAI; (7) NOBUHIKO TAKANE; (8) YACHIYO YOSHIZAWA; (9) TOSHINORI SAITO; (10) HIROSHI OGAWA; (11) HIDEHI TAKEBE; (12) ATSUYUKI SATO; (13) KOZO NAGAOKA; (14) SHUNZO FUKATSU; (15) AKIRA OKADA.

Application No. 438/Cal/1987 filed June 03, 1987.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

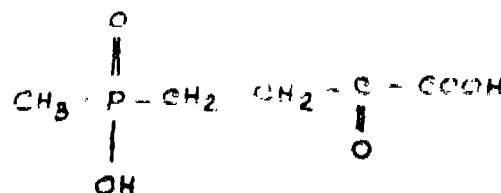
## 18 Claims

A process for the production of L-2 amino-4-(hydroxymethyl-phosphinyl)-butyric acid represented by the formula (I) of the accompanying drawings :



Formula (I)

which comprises treating (1) 4-(hydroxymethylphosphinyl)-2-oxo-butyric acid represented by the formula (II) of the accompanying drawings



Formula (II)

with (2)(a) one or more transaminases or (2)(b) with one or more micro-organisms capable of producing one or more transaminases, in the presence of (3) one or more aminodonors said acid and amino donor compounds being present at a molar ratio in the range 1:10 to 10:1, at a temperature of from room temperature to 60°C, preferably 25°C to 50°C and pH of 7.0 or higher, preferably 8.0 to 9.0.

Compl. specn. 56 pages

Drg. 1 sheets

CLASS : 85-K

165700

Int. Cl. : B 01 j 8/24; F 27 b 15/00.

# FLUIDIZED BED SYSTEM.

Applicant : METALLGESELLSCHAFT AKTIENGESSELLSCHAFT, OF REUTERWEG 14, D-6000, FRANKFURT AM MAIN, WEST GERMANY.

Inventors : (1) LUDOLF PLASS, (2) WOLFGANG FRANK, (3) RONALD KNOCH.

Application No. 441/Cal/1987 filed June 05, 1987.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

# 6 Claims

A fluidized bed system comprising:

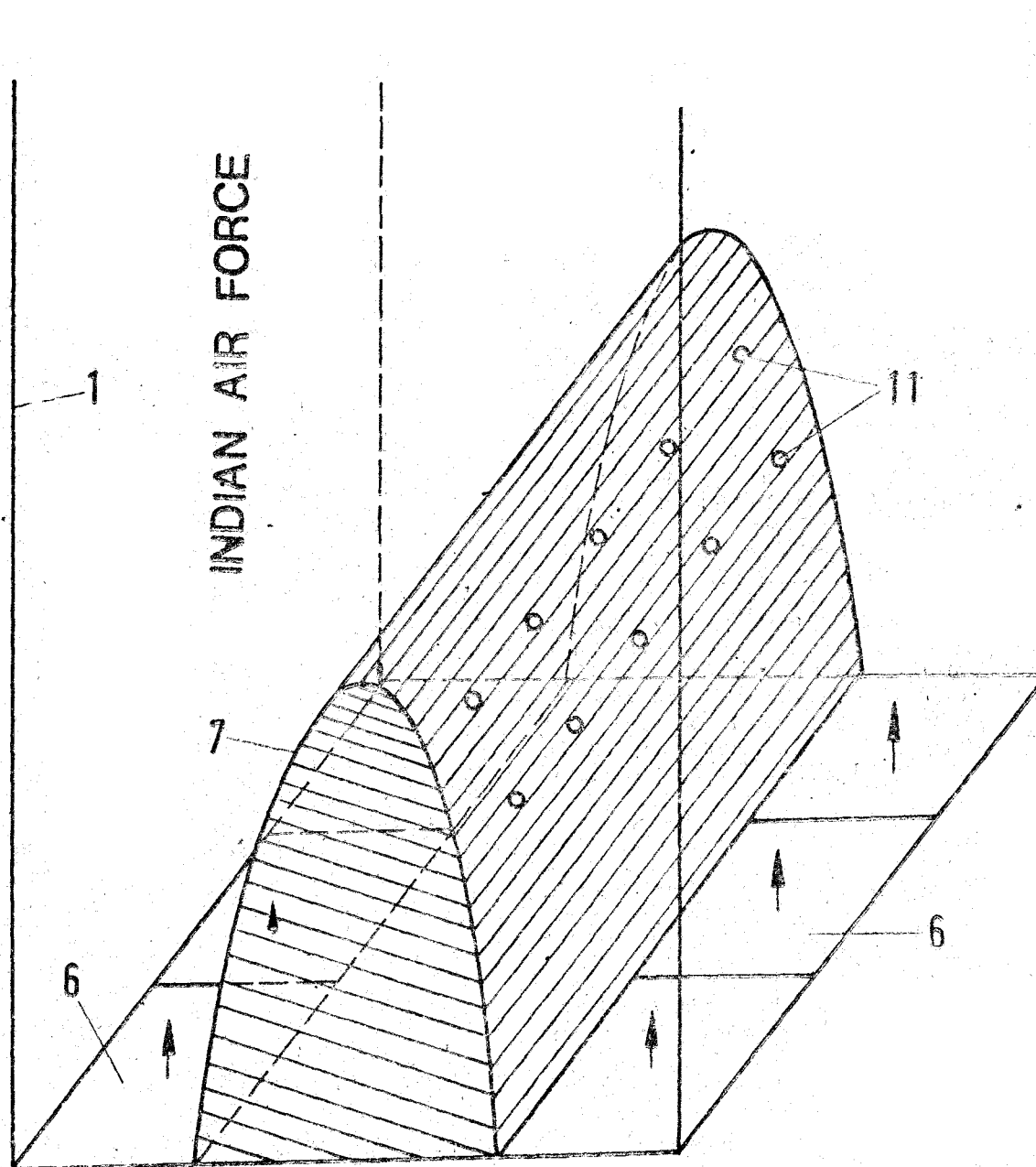
a fluidized bed reactor;

a solids separator and a return line for carrying out exothermic processes in a circulating fluidized bed, which system comprises lines for supplying oxygen-

containing primary gases through the bottom of the fluidized bed reactor;

lines for supplying oxygen-containing secondary gases on a level which is at least 1 meter above the bottom of the reactor but not in excess of 30% of the height of the reactor; and

a fuel line, which opens into the fluidized bed reactor between the primary and secondary gas inlet means, characterized by one or more displacing body (bodies) (7), which covers or cover 40 to 75% of the bottom surface area of the fluidized bed reactor (1) and has or have a maximum height that is equal to one-half of the height of the fluidized-bed reactor (1).





## REGISTRATION OF DESIGNS

The following design have been registered. They are not open to inspection for a period of two years from the date of registration except as provided for in Section 50 of the Design Act, 1911.

The date shown in the each entry is the date of registration of the design included in the entry.

Class 3. No. 161057. Mehta Clock, Behind State Bank of Saurashtra, Morbi (Gujarat) (India), a regd. Partnership firm. "Wall Clock". 6th June, 1989.

Class 3. No. 161332. International Business Machines Corporation, a Corporation organised and existing under the laws of the State of New York, United States of America, of Armonk, New York 10504, United States of America. an "Electronic Appa-

ratus". Reciprocity date is 15th June, 1989 (U.K.).

*Copyright Extended for the Second period of five years*

No. 157195. . . . . Class 1  
Nos. 160806, 153527, 160543, 155172. . . . . Class 3.  
No. 160200. . . . . Class 5.

*Copyright Extended for the Third period of five years*

No. 157195. . . . . Class 1  
No. 160543. . . . . Class 3.  
No. 160200. . . . . Class 5.

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